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—THE—

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ARCHITECTS, CIVIL AND SANITARY ENGINEERS, PLUMBERS, DECORATORS, BUILDERS, CONTRACTORS, AND MANUFACTURERS OF AND DEALERS IN BUILDING MATERIALS AND APPLIANCES.

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TO ADVERTISERS.

For the benefit of Advertisers, a copy of this Journal is mailed each week to persons mentioned in the CONTRACT RECORD reports as intending to build, with a request to consult our advertisement pages and write advertisers for material, machinery, etc.

Statues for Parliament Hill.

ARTISTS are being invited by the Secretary of State to submit designs and models for statues of Her Majesty the Queen and the late Hon. Alexander Mackenzie. The statues are to be placed within the Parliament grounds at Ottawa; that of the Queen is to be located on the terrace directly in front of the buildings. The location of the other statue has not yet been chosen. This should have been one of the preliminary steps in the undertaking, so that designs might have been adapted to the surroundings. The sum of $5,000 has been appropriated for each statue, an amount altogether inadequate for the purpose. Twenty thousand dollars would be a sufficiently moderate figure for a statue of the Queen to occupy such a conspicuous position. It is gratifying to note that the competition is restricted to Canadian artists. It is to be hoped that the preference thus given to native talent will not be offset by the expenditure being limited to a figure which will not allow the competitors scope for their abilities.

The London Hospital Competition.

ARCHITECTS who may not wish to have their trouble for their pains would do well to look carefully into the conditions before entering the competition for plans for the proposed hospital building at London, Ont. In the printed instructions to architects, the committee in charge state that the competition will be decided by an expert appointed by the Ontario Association of Architects. On inquiry we learn that the O.A.A. have never been consulted with regard to the matter, consequently the statement referred to is totally unauthorized. We presume the Association will call the promoters of the competition to account for this unwarranted use of its name. In addition to this there are other peculiar features of the competition. Architects were originally given to understand that while the committee did not desire to pay an architect's fees for superintendence, they were prepared to pay the usual fees for preparation of drawings. At a later stage, however, the announcement was made that a lump sum of $500 would be paid to the winner of the competition for his drawings. This sum is less than one and one-half per cent. of the estimated cost of the buildings. The whole affair has the appearance of being arranged to admit of the work being given to some favorite architect, who, in conjunction with the committee, would at small cost reap the advantage of the ideas evolved by all the competitors.

The Renaissance of Wro't Metal.

THE return to favor of wrought metal work, after a lengthened period of decadence is a noteworthy feature of the architectural development of the present day. It is also a subject for congratulation, indicating in some measure an improvement in public taste. The manufacture of architectural wrought metal work, which a few years ago bade fair to become one of the lost arts, has kindled into vigorous life again, and is become an important industry. The favor recently bestowed by architects and others on this material has brought to the front men with ability to meet the highest requirements. It is gratifying to observe that we have in this line of manufacture in Canada ability of a high order, and work is being produced here which will favorably compare with the best foreign product. It is likewise satisfactory to learn that most of the leading Canadian architects now specify entirely Canadian material, although a few cling to a prejudice in favor of the foreign made article. We understand that the new court house building in Toronto will contain some excellent examples of Canadian skill in design and manufacture of wrought iron and bronze work. The appearance of most of the new buildings under construction is enhanced by the use of this class of material while the substitution of well-designed wrought iron fencing for wood and cast iron has greatly increased the attractiveness of the residential streets of many of our cities.

Qualifications of Firemen.

THE important changes which have taken place in recent years in materials for building, as well as in methods of construction, have rendered necessary the possession by firemen, and especially by chiefs and superintendents of fire brigades, of a wider range of knowledge than was formerly considered necessary. When, for example, the electric elevator in a New York building of over twenty stories, fell recently, killing the engineer and elevator boy, causing a water main in the basement to burst, and flooding the basement, there was no one at hand to stop the electric machinery, and the firemen were called out for the purpose. Fortunately they knew what to do, and their knowledge promptly applied, was doubtless the means of preventing a worse catastrophe. It is pertinent to ask how many firemen possess knowledge of this character, for which ten years ago there was no demand? In connection with the recent fires in Toronto, the suggestion was made that the firemen should spend some of their leisure time in making themselves familiar with the interiors of the principal buildings in the business district of the city. The proposal is one which, if acted upon, would aid in preventing the destruction of property and life. Candidates for the position of assistant superintendent of the Dublin fire brigade, were compelled to submit to a competitive examination to test their knowledge of building construction. The following is a sample of the twenty questions which they were called upon to answer: "If 29 cubic feet of brickwork weigh a ton, what weight will the supports of a shop front have to carry, exclusive of weight of roof, floors, and contents, the wall being 18 feet in length, 36 feet high and 18 inches thick, making no allowance for window openings?" We have not observed anything which would indicate that firemen in Canadian cities are instructed in subjects such as these, upon a knowledge of which their own safety and efficiency and the safety of others may in some cases depend.

Rights of Architects in Competitions.

IT is gratifying to learn that a test case is to be brought in the United States Courts to determine the legal rights of architects in competitions in which the conditions have been violated. This test case is brought against the commission controlling the competition for a State Capitol building at Harrisburg, Pa. Eight architects were invited to enter the competition, with the understanding that one of their number, whose design should be recommended by the expert advisers to the commission, would be entrusted with the work. The commission, actuated, it is supposed, by political considerations, refused to act on the recommendation of their experts, rejected all the designs, and announced a second competition. On this ground an injunction has been applied for on behalf of the competitors "to restrain the commission from acting, and to compel them to perform the provisions of the programme for the selection of an architect, author of one of the eight designs reported to them by the Board of Experts under the provisions of the programme, and such other and further relief as may be proper in the provisions." The result of this action will be looked for with interest by architects everywhere who may at one time or another have suffered injustice at the hands of persons controlling architectural competitions. We trust a check will be put on the practices of those who under false pretensions seek to obtain gratis the benefit of architectural ideas which by right should be paid for.

The P. Q. A. A.

A PERUSAL of the proceedings of the recent annual meeting of the Province of Quebec Association of Architects, printed in this number, will show that the organization has not been inactive during the year. The Association has been working in a quiet manner for the furtherance of the interests of Architecture, and is making its influence felt in several directions. To those acquainted with the discouragements under which it has had to labor, the quiet determination with which the leading spirits in the organization put forth effort in behalf of the well-being of the profession, is extremely admirable. It is by the unwearying efforts of such men that reforms are accomplished, and we have no doubt that in years to come the importance of the work which this Association is now doing will be abundantly manifest. The improvement of local building laws, the securing of needed amendments to its charter, the appointment of Municipal Art Committees, and the formation of a Dominion Institute of Architects, are some of the important subjects which the Association has had under consideration during the year. While it is matter of regret that none of these objects have so far been achieved, advancement has been made with regard to most of them, and in the case of some there is reason to anticipate final success. Mr. Peachy, the new president, is a gentleman of recognized ability, and being resident at the seat of the local government of the province, will be in a position to help forward the changes which the legislature at its next session will be petitioned to make to the statutes bearing on the practice of architecture.

Trade Commissions to Architects.

Our attention has quite frequently been called to the fact that some architects in Canada expect and in some instances attempt to exact a commission from manufacturers and dealers whose materials they are asked to specify or purchase. Complaints have come to us regarding this matter from so many different sources, accompanied in some instances by names and full particulars of the transactions, that we are reluctantly forced to the conclusion that they cannot be unfounded. A Toronto manufacturer states that he recently received an order for certain goods from a well-known architect in an Eastern city, with accompanying letter, which read: "I understand you are accustomed to allow a percentage to the trade off your catalogue prices. I want you to credit this percentage to me." Such practices on the part of an architect are undignified and dishonest. They are unfair to the client, who employs the architect to impartially select for him the best goods, and also to the manufacturer or dealer who is desirous of doing business in an honorable way by selling his goods on their merits. The architect who accepts a favor of any kind from a manufacturer or dealer at once places himself under obligation to give favors in return, which favors usually come out of the pockets of his clients. On the other hand, the manufacturer and dealer are liable to press the advantage they have acquired to such a degree that by and by the architect feels himself bound to resent their implied ownership of him by specifying somebody else's goods. There is fortunately a brighter side to this picture. We have been told of instances in which goods sent as presents have been promptly returned, accompanied by a message more forcible than polite, and the person offering the bribe thenceforth occupied a conspicuous place on the architect's black list. For architects of this character the public, the manufacturer and the dealer have the highest respect, while those who ask and accept favors must often feel their ears tingle as the result of the opinions freely expressed behind their backs.

BY THE WAY.

Building Inspectors, like other public officials, come in for a fair share of criticism for their alleged sins of omission and commission. Some of the criticism is well deserved; some of it is not. But what man with a spark of humanity in him could find it in his heart to find fault with the Building Inspector of Denver, Colorado, whose duties are thus defined: "The commissioner of inspection shall have charge of the inspection of buildings and parts of buildings, drains, drain laying, elevators, boilers, gas and electric fittings, gas and electric lights and all other apparatus and machinery requiring inspection and regulation, as the same may be authorized by ordinances; the inspection and control of electric wires, the inspection of weights and measures, the smoke nuisance, the erection and care of work houses, charities and corrections, and the care of markets and public baths."

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To know the actual cost of various classes of completed work is a help to the architect and builder in approximately estimating what work of a similar character should cost. For this reason the following calculations recently published in an American review, based on returns from the City Building Department, as to the cost of various classes of building in New York, should have an interest for readers of this journal: Frame dwellings, of the cheap two-story class, average in cost $3.71 per square foot of ground covered, or $1.85 per square foot of floor space. Brick dwellings of three storeys average $3.65 per square foot of floor, counting nothing for the cellar; five-storey houses cost exactly the same, and four-storey ones, averaging the few examples found, cost a trifle less. Flats of five or six storeys average only $2.03 per square foot of floor; flats with stores underneath cost $2.83; "stores and lofts," that is, ordinary mercantile buildings, give $3.12 per square foot of floor, where the building is not over six storeys high. A six-storey hotel cost $3.33 per square foot of floor, and a twelve-storey warehouse a little less than $3. Office buildings of the "sky-scraper" sort are much more expensive, one of nineteen storeys costing $116.82, and one of twenty-one storeys $123.34 per square foot of ground covered, or $6.14 and $5.37 respectively per square foot of floor-space. Of course, prices for material and labor are considerably higher in New York than in any part of Canada. It is this difference in prices as between one locality and another that renders it exceedingly difficult to estimate the probable cost of work in one locality by the cost of completed work of a similar kind elsewhere.

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Canadians will be interested to learn that the Princess Louise, whose skill as an amateur painter and sculptor is well known, has recently turned her attention to architecture. Workmen are at present engaged in completing a building designed by the Princess (with the assistance of a young London architect) and erected on the Argyll ducal estate in Scotland. The plans designed by Her Royal Highness were for an extension of the little hostelry at Roseneath, a sylvan shaded resort most charmingly situated on the western bank of one of the long blue lochs that open off the Firth of Clyde. Roseneath is one of the quietest retreats on the Clyde. Few trippers profane its walks, and house-letting accommodation is limited in the extreme. On this account the Marchioness and Marquis of Lorne have for some past found in Roseneath a delightfully quiet recruiting-ground at the close of the London season, and the little inn has been their home. The enlargement designed by the Marchioness is being carried out to provide a wing for the distinguished couple when they visit the district. The wing will include some half a dozen bed rooms, public rooms, a spacious hall and offices, and the plans have been drawn up with an architectural success so great that the work may in coming years be looked back upon as the pioneer design in the opening up of a new field for the ever-widening work of womankind. The drawingroom is a handsome apartment, and its large windows face the picturesque waters of the Gorelock and Ben Lamond while a spy window has been inserted, no doubt for the purpose of commanding a pretty peep of the western sunsets and the Argyll hills. There is also an alcoved fireplace with arched stone mantelpiece. In the dining-room the windows have Mediæval arches and iron mullions, with casement and small panes. A gun-room has been provided, and, as becometh a lady architect, the kitchen is a poem in red tiles. Internally pretty in design, externally the building is straggling and far

from pretty. It has many quaint features, however, in the form of knobbed rhones, spouts instead of rain-conductors, and basket windows. The design is royal and also unique, and the inn when finished will be by no means a conventional one. So close is the interest taken in the work connected with the rearranged hostelry by Her Royal Highness that she intends herself to paint the device on the sign that is to hang in old-time fashion over the doorway of the public entrance to the building, and the walls of the new apartments are to be artistically decorated according to her own scheme of treatment.

ILLUSTRATIONS.

ERRATA.—In the September number of the ARCHITECT AND BUILDER the name of Mr. "David" Maxwell was given as the architect of the Bell Telephone Company's building. It should have read "Edward" Maxwell.

DESIGN FOR PROPOSED CITY HALL AT ST. THOMAS, ONT.—EVAN T. MACDONALD, ARCHITECT.

RESIDENCE FOR MR. H. W. FORD, ST. THOMAS, ONT.—EVAN T. MACDONALD, ARCHITECT.

INTERIOR VIEWS IN THE RESIDENCE OF MR. M. J. HANEY, ROSEDALE, TORONTO.—ERNEST R. ROLPH, ARCHITECT.

The two interior views of Mr. M. J. Haney's house in Rosedale, Toronto, published in this issue, should prove interesting, as showing the success with which an old house could be remodelled.

The alterations, which are somewhat extensive, were done under the general superintendence of Mr. Wm. Clarke, in accordance with the designs of Ernest R. Rolph, architect. All interior decorations were executed by Wm. H. Elliott & Co., of this city.

THE HOLY BLOSSOM SYNAGOGUE, BOND STREET, TORONTO.—J. W. SIDDALL, ARCHITECT.

The building, which is an adaptation of the Moorish style of architecture, is constructed of Ohio sandstone, plain and pressed brick. The most important feature of the Bond street facade, shown in the illustration, is an 18 foot semi-circular arch, highly ornamented with terra cotta. In the tympanum of this arch are bands of stone containing the words in English and Hebrew, "The Holy Blossom Synagogue," "Hear, O, Israel, the Lord our God the Lord is one," in gilded incised letters. Above the arch is a group of five windows with terra cotta columns and archivolts; on either side are flanking towers, containing long triplet windows and crowned by bulbous domes. At the angles of these towers, which contain the main staircases, are piers surmounted by smaller domes, the whole facade being crowned with arcaded cornices and balustrade.

The main entrances are in an open vestibule guarded by iron collapsable gates and lined with enamelled bricks and terra cotta. In this vestibule are three doordays, two leading to the inner vestibules, from which are staircases to the main vestibule above; the centre doorway leads to the school room.

The auditorium is lighted by a large central dome, decorated on a ground of blue of gradually decreasing density. A richly carved casing of quartered oak, 16 feet wide and 15 feet high, encloses the ark. Around the highly ornamented pulpit of the rabbi and desk of the cantor, radiate in concentric circles the seats of the congregation. The main gallery extends around seven sides of the octagon and over the front vestibules.

The school room, which is almost on a level with the street, is divided by rolling partitions into eight class rooms.

The building is lighted with gas and electric light and heated by hot water and air.

The contractors were Messrs. Hutchinson & Carlyle.

REGULATIONS FOR THE CONDUCT OF GOVERNMENT COMPETITIONS.

THE Secretary of the United States Treasury has recently declared his intention to put in force the act passed by the United States Congress in 1893, providing for the obtaining by competition of plans for government buildings. The Acting Supervising Architect has prepared the following regulations governing such competitions:

1. At least five architects of good professional standing, who are citizens of the United States, shall be invited by the Secretary of the Treasury to submit plans, drawings and specifications in accordance with the conditions set forth in these regulations; and such plans, drawings and specifications shall be passed upon as to merit by the commission herein provided for.

2. A commission shall be appointed by the Secretary of the Treasury, consisting of the Supervising Architect of the Treasury Department and two architects, or experts in the construction of buildings, whose duty it shall be to judge and report to him as to the relative merit of the designs and plans snbmitted.

3. The office of the Supervising Architect will furnish full data and information as to the cost and the general requirements of the buildings placed in competition under these regulations, and the successful architect will be awarded a commission to prepare complete plans, drawings and specifications and to locally supervise the buildings won in any competition.

4. The architect to whom said commission is awarded will receive in compensation for his full professional services, including local supervision of said building, a fee computed at the rate of five per cent. upon all sums up to $500,000, 3½ per cent. upon the next $500,000 or any part thereof, and 2½ per cent. upon any excess beyond $1,000,000.

5. It must be understood that no claim shall be made upon the United States by any successful competitor for any fee, percentage or payment whatever, or any expense incident to, or growing out of, his participation in this competition.

6. The Department agrees to make selection from the designs submitted if, in its opinion, one suitable in all respects, as to design, detail and cost, be submitted; but expressly reserves the right to reject any and all plans, designs and specifications submitted, and to reopen the competition, if, in the opinion of the commission herein referred to, or of the Secretary of the Treasury, no design suitable in all respects has been submitted.

7. Each competitor must submit with his plans a detailed statement of cost.

8. It must be understood that a competitor will forfeit all privileges under these regulations who shall violate any of the conditions governing this competition, or who shall seek in any way, directly or indirectly, to gain advantage by influencing in his favor any of the commission.

9. No member of the commission herein referred to shall have any interest whatever, direct or indirect, in any design submitted in this competition, or any association with, or employment by, any of the competitors, and no employee of the Treasury Department shall be allowed to enter the competition herein provided for.

10. Each set of drawings, with its accompanying description, must be securely wrapped and sealed and addressed to the "Secretary of the Treasury, Washington, D. C.," plainly and conspicuously marked with the name of the building under competition, and without any distinguishing mark or device which might disclose the identity of the competitor.

11. There must be enclosed with each set of drawings, etc., a plain, white opaque envelope, within which the competitor will place a card bearing his name and address. The envelope must be securely sealed with a plain wax seal, having no impression, legend, device or mark upon it which might disclose the identity of the competitor.

12. Upon opening the packages containing the drawings, the commission will number the envelope containing the name and address of the competitor, and will place the same number upon

each drawing, plan, specification, etc., submitted by him and will preserve unopened the envelope containing such name and address until final selection shall be made.

13. The commission shall place out of competition any set of drawings as to which the conditions of these regulations have not been observed, and examine those remaining, giving to each the rank to which—in their judgment—its merits entitle it, and submit their findings to the Secretary and Treasurer.

14. The selection of one of the designs by the Secretary of the Treasury, and its subsequent approval by him, the Postmaster-General and the Secretary of Interior shall be final and conclusive.

15. In the event that the architect to whom the commission is awarded should prove to be an incompetent and improper person, the Secretary of the Treasury expressly reserves the right to remove him, to revoke the commission awarded him and to annul the contract entered into with him; but such architect shall receive equitable compensation for the work properly performed by him up to the time of his removal, to be fixed by the Secretary of the Treasury.

16. The architect to whom the commission is awarded shall revise his competitive drawings to meet the further requirements of the Secretary of the Treasury, and upon the basis of these revised preliminary drawings shall prepare full detailed working drawings and specifications for said building; and shall thereafter, from time to time, make such changes in the plans, drawings and specifications as may be directed by the Secretary of the Treasury, for which just compensation shall be allowed; but no changes in the plans, drawings and specifications shall be made without written authority from the Secretary of the Treasury.

17. The architect to whom the contract is awarded shall, at his own cost and expense, when required to do so by the Secretary of the Treasury, make such revision and alteration in the working drawings and specifications of said building as may be necessary to insure its proper construction and completion within the limit of cost as furnished by the office of the Supervising Architect.

18. The sum upon which the Architect's commission is to be computed shall be the sum of money expended for the actual construction cost of the building, as ascertained by contracts awarded, not including furniture, gas and electric light fixtures and electric light plants.

19. The compensation herein stipulated to be paid to said architect shall be in full payment of all charges for his full services, inclusive of all travelling and other expenses.

20. The architect's commission shall be paid as the work progresses, in the following order:

One-fifth of fee when preliminary drawings are completed and approved in the manner herein provided; three-tenths of fee when general working drawings and specifications are completed and copies delivered to the Supervising Architect, and balance of percentage monthly, upon the basis of vouchers issued in payments for work performed.

21. Until the actual cost of the building can be determined the fee of the architect will be based upon the proposed cost of the work, as above indicated, and will be paid as instalments of the entire fee, which will be finally based upon the actual construction cost of the building when completed.

22. The Department will provide a competent superintendent of construction, whose qualifications shall be passed upon by the architect, but a selection must be made from a list of not exceeding six names proposed by the Secretary of the Treasury.

23. The architect is to provide for the use of the Treasury Department one set of tracings of all working drawings and of revised competitive drawings, two copies of specifications and one copy of detailed estimate of cost of entire building, all of which will remain in the custody of the Department, and to be and remain the property of the United States and not of the architect, but such drawings and specifications shall not be used for any other building, and the office of the Supervising Architect will furnish for the use of intending bidders all necessary photographic duplications of plans and copies of specifications.

24. Upon the award of the contract to the architect, all designs of unsuccessful competitors will be returned to them, and no use will be made of any of the drawings not accepted, or of any part that may be original, without consent of the author thereof.

25. Payments upon the work of construction under contract will be made monthly, at a rate of 90 per cent. of the value of the work actually executed and in place, upon vouchers certified by the architect in charge and countersigned by the superintendent of construction representing the United States government, which will be paid by a disbursing officer appointed by the Secretary of the Treasury.

26. The Supervising Architect of the Treasury Department will receive the proposals for contracts to be awarded, and shall likewise determine the manner in which the various branches of the work are to be contracted for.

27. All contracts, except for exigency purposes, shall be properly advertised for thirty days, and shall be awarded by the Supervising Architect, with the approval of the Secretary of the Treasury, to the lowest responsible bidder.

28. All further details necessary properly to carry out these regulations may be arranged by the Supervising Architect, from time to time, provided they do not conflict herewith.

29. The foregoing regulations shall be subject to modification and change at the pleasure of the Secretary of the Treasury.

CHIPS.

The death is reported of John Hartigan, contractor, Montreal.

Mr. Walter Mills, manager of the Silica Barytic Stone Co., of Ingersoll, Ont., has been made an honorary member of the New York Board of Trade and Transportation.

It is stated that A. Bradzeau, of Pakenham, Ont., intends utilizing his water power at Portage du Fort by putting in a plant for sawing stone, and that he will open his green serpentine stone quarry.

Mr. Forthingham, superintendent for Mr. J. E. Askwith, contractor for the Dominion Government Armoury at Halifax, N.S., fell from the walls of the building a few days ago, sustaining serious injuries. It is thought he will recover.

Salmon red or pale green grey walls look well with woodwork of cream, a frieze of cream, green gray or pink, having a cornice of cream, salmon, copper, and greenish grey, ceiling of light cream, with the upholsterings and draperies of greenish gray.

Mr. Arthur McGuire, Consul General to Canada for the Argentine Republic, sailed from Montreal for Buenos Ayres on the 14th inst. Mr. McGuire has organized a syndicate of Canadian and American capitalists to undertake the construction of public works in the Argentine Republic.

The Builder says that the custom of inscribing the name of the architect on new buildings has become practically universal in Belgium, and that not only the profession but the public regards the signature of the artist as being as desirable on a building as on a painting or a piece of sculpture; and it has even been suggested that it should be made compulsory.

The American Asbestos Company's mine at Black Lake, Que., was sold by the liquidators of the estate, Messrs. J. J. Penhale and R. R. Burrage, at Sherbrooke, recently. The purchasers were Messrs. L. & E. Wertheim, of Frankfort, Germany, the price being $14,900. This selling price only represents a fraction of the actual cost and value of the property.

To Color Iron Blue.—One hundred and forty grams of hyposulphite of soda are dissolved in a liter of water (4⅔ ounces to 1 quart); 35 grams of acetate of lead are dissolved in another liter (1⅙ ounce to 1 quart); the two solutions are mixed, are made to boil, and the iron is immersed therein. The metal takes a blue color, snch as is obtained by heating it.

Extensive alterations have been made to the registry office at Guelph, Ont., under the superintendence of Mr. Benalick, contractor. The boxes for keeping the deeds, etc., are of steel, with nickel handles, and were furnished by the Lang Document File Co. The desks and office furniture are of quartered oak, furnished by the Newmarket Specialty Co., who are Canadian agents for the manufacturers at Rochester.

Judgment has been rendered by Mr. Justice Burbidge in an action brought by the government of Canada against Messrs. Puopore & Fraser, contractors for the Morrisburg canal. Some years ago the steamer Acadia, while passing through the canal, foundered upon a rock and sustained serious damage. Action was brought against the government by the owners of the steamboat and cargo, and judgment was recovered for about $45,000. Subsequently the government commenced an action against the contractors who were engaged in widening the canal, claiming that through their negligence a large stone had been deposited and left in the bottom of the canal, upon which the steamer struck. The judgment just rendered is in favor of the contractor and includes costs against the government.

PROVINCE OF QUEBEC ASSOCIATION OF ARCHITECTS.

PROCEEDINGS OF THE SEVENTH ANNUAL CONVENTION.

THE seventh annual convention of the P. Q. A. A. was held in the city of Quebec on Thursday, September the 30th, and Friday, October the 1st. The members of the Association in the old city of Champlain were indefatigable in their efforts to make it a success, and it was a decided success, not only socially, but on account of the importance of the deliberations and of the resolutions adopted.

The members were welcomed with that large hospitality which is one of the characteristic features of Quebec, while the weather was delightful throughout.

With the kind permission of the municipal authorities and particularly of His Worship the Mayor of the city, the sessions were held in one of the spacious committee rooms of the new city hall.

The first session opened at 10 o'clock in the forenoon of Thursday, September 30th, under the presidency of Mr. A. T. Taylor. There were present: Messrs. A. T. Taylor, J. F. Peachy, A. Raza, A. C. Hutchison, Jos. Venne, S. H. Capper, E. B. Dussault, A. Mailloux, J. Nelson, J. A. Monette, J. P. Ouellet, J. Z. Resther, G. E. Tanguay, M. Perreault, C. Dufort, H. Staveley, D. Ouellet and A. H. Larochelle.

There was first the reading, by the Secretary, Mr. Jos. Venne, of the minutes of the two last general meetings, and afterwards the presentation of the annual report of the Council, as follows:

MR. J. F. PEACHY,
President-Elect Province of Quebec Association of Architects.

REPORT OF COUNCIL.

The council of the Association beg to present the seventh annual report of its transactions. Years are passing away and the Association enters upon the eighth year of its existence. Although the work has been quietly done, it has none the less been most useful and effective. The past year has continued to be one of depression in the building trades, but events point to a more encouraging and satisfactory state of things in the future for the profession generally. This report having been typewritten beforehand and distributed to the members, in accordance with the resolution passed at the last meeting, you will be able to appreciate the work of the council more fully and to note the progress which has been made.

COMPETITION OF PUBLIC ARCHITECTURAL WORKS.—Special attention is drawn to the negotiations entered into with the governments and the city of Montreal to induce them to throw open public architectural works to competition.

ARCHITECTURAL AND ARTS AND CRAFTS EXHIBITION.—The Architectural and Arts and Crafts Exhibition held in connection with the last annual meeting in Montreal was a decided success, being novel and exceedingly interesting. It was encouraging to find that the members responded so willingly and heartily to the formation of a guarantee fund and your council was glad to be in a position to return to the members a portion of the moneys subscribed, as the whole amount was not required. We take this opportunity of heartily thanking numerous friends who so readily lent valuable and precious objects of art for exhibition. An effort should be made to repeat at stated intervals similar or kindred exhibitions, as they have proved themselves to be one of the most effective means of promoting fellowship and progress amongst our members and a valuable method of education in art.

LECTURES AND DINNERS.—The winter lectures and dinners were organized on a new basis and the council congratulates the Association upon the good results obtained. The lectures were delivered in the Art Gallery, Montreal, which was kindly placed at our disposal by the Council of the Art Association, thus continuing during the past year many tokens of kindness to our Association, which are hereby gratefully acknowledged. Principal Peterson, of McGill University, very kindly consented to lecture for us on: "The Ruins and Antiquities of Athens," which proved most interesting. Prof. Capper, the recently appointed Professor of Architecture at McGill, also lectured on: "The Builders of the Egyptian Pyramids," Two other lectures were given respectively by our president on: "The Story of an Illustrious Abbey," and by Mr. Alex. C. Hutchison on: "Gothic Architecture in Northern Italy." These lectures were well attended by a distinguished and learned audience, ladies forming a notable addition and adding greatly to the brilliance of the gatherings. These lectures were all illustrated by diagrams and also by stereopticon views. Instead of monthly dinners as formerly, it was decided to hold only two dinners during the winter and to make these specially attractive. This was done and the result was very gratifying. The dinners were very pleasant social reunions of the members and during the evenings most profitable talks on architectural subjects were initiated. It is hoped that these opportunities for social intercourse will be continued and that more of the members will avail themselves of them.

FORMATION OF A DOMINION INSTITUTE.—As requested by a resolution passed at the last general meeting, the council, from its first sitting considered the advisability of the organization of a Dominion Institute of Architects and correspondence was opened with sister associations of British Columbia and Ontario; only the latter, however, has as yet responded to our advances. A draft of constitution was prepared by your council and sent to the Ontario association. Some legal points have been raised which are now under consideration. Many difficulties present themselves in the working out of such a scheme, amongst others the matter of ways and means and the economical and satisfactory working of such a Federal Institute in a great Dominion such as ours. They are not, however, insuperable, and your council hopes the undertaking may ultimately be consummated.

SCHEDULE OF CHARGES.—Your council has not been successful yet in obtaining the assent of the Lieutenant-Governor in Council to a schedule of charges. In the meantime, our recognized schedule of charges has had the signature of all the members attached, with the exception of one, and has been lithographed and distributed to all the members. It has already given proofs of its utility and has been of great help to some members in strengthening their position in transacting business.

COMPETITIONS.—The consideration of public competitions, especially in connection with public works, has had considerable attention in the course of the year, and your council thought it expedient to memoralize both governments and the city of Montreal. This important matter should not be forgotten in the deliberations of the next council, who could be instructed to continue the work commenced, and all cities, towns and municipalities should be approached in this matter. Private competitions, which may he termed frivolous, have been attempted, and some members were induced to take part in them. Some complaints having been made to the council, a circular putting forth the desired attitude of members in such cases was prepared and issued to members.

MR. FULLER'S SUPERANNUATION.—On the superannuation of Mr. Fuller, who has so long worthily filled the office of Dominion Architect, your council memoralized the government to increase the pension allowed him, if it was at all possible, in view of his long and valuable services. Although not immediately successful, it is hoped that our efforts may not have been useless.

GOVERNMENT APPOINTMENT OF CHIEF ARCHITECT.—Before the appointment by the government of a successor to Mr. Fuller. your council took the liberty of urging on the Federal government the great advisability of throwing open the architectural public work to architects generally instead of centralizing the same in the Dominion Architect's Department in Ottawa, so that the chief architect would be a supervising architect only, as the name implies, aud further that in the appointment of the chief architect, integrity, competence and distinguished ability should

be the first conditions. An acknowledgement was received from the Minister of Public Works saying that the suggestions would be duly considered by the government when they come to make the appointment.

ASSOCIATION SEAL.—The committee having in charge the competition for a seal for the Association experienced some difficulty in completing its task. Although the honorarium offered was reasonable, only two competitors presented designs, and the council having accepted one of them, has had the seal made as it now appears on our letter headings, etc., the regular raised seal being kept in the offices of the Association. Your council trusts it will have your approval.

STANDING ART COMMITTEE.—Your council regrets to say that in spite of repeated and renewed efforts, the City Council of Montreal has not yet accepted our suggestions for the appointment of a Standing Art Committee, to advise and assist the council in matters affecting the beautifying of the city. A large number of names of leading citizens of Montreal was obtained and appended to the petition. Your counncil hopes, however, to be able soon to announce that this is an accomplished fact.

NEW BY-LAWS FOR THE CITY OF MONTREAL.—Your council is glad to be able to report that although the new building by-laws are not yet law, still they have advanced several stages this year. The sub-committee composed of aldermen, builders and a representative of the Association appointed by the City Council completed their arduous labors of going over the drafts prepared by us. A few amendments were made, some of which we accepted. The by-laws are now in the hands of the City Attorney, and it is hoped that at our next annual meeting your council will be able to proclaim them as law and in operation.

BENEFACTIONS.—The benefactors of the profession have not been numerous, but have distinguished themselves by their generosity. Chief amongst them must be mentioned the name of Mr. W. C. McDonald, not that his donations directly or immediately benefitted the Association, but we recognize that the creation and endowment of a Chair of Architecture at McGill University is amongst the most potent helps given to architectural education in this country.

LIBRARY.—The additions to the library have not been numerous during the year. Four volumes were presented by Mr. W. H. Dawson, through our President, on building construction, by A. Breyman, in German, and for which the thanks of the Association were tendered. In accordance with a desire expressed, books were allowed to be taken out of the library by members, but this privilege has not been taken advantage of to any great extent. Notwithstanding its actual usefulness, which has been especially proved in the case of a dispute on the use of some French words in a specification, it is very desirable that the books in the library should be increased so as to make it more valuable to the members.

MOUNT ST. LOUIS INSTITUTE.—The correspondence opened with Mount St. Louis Institute for the admission to matriculation of their pupils upon special lines, failed to materialize.

PORTRAITS OF PAST PRESIDENTS.—A gallery of photographic portraits of the past presidents of the Association has been commenced, and it is hoped will be continued. Nearly all ex-presidents have so far contributed personally to this object.

HONORARY MEMBERS.—His Excellency Lord Aberdeen, Governor General of Canada, having graciously intimated his pleasure to accept the office of patron of the Association, was duly elected to the office by acclamation at a special meeting of the Association. W. C. McDonald, Esq., was also, at the same meeting, elected honorary member for his generous help and benefactions in aid of architectural education in this province and throughout the Dominion.

OFFICIAL LIST.—Sixty-three members are actually inscribed upon the Official List.

NEW MEMBERS.—Three new members were admitted upon presentation of satisfactory credentials, and one new member by passing the registration examination.

STUDENTS' EXAMINATION.—Three students have passed the examination for matriculation during the year.

Your Council are glad to state that the Association has lost no members by death during this year.

There were ten regular meetings of the Council, seven special meetings, aud one general meeting.

ATTENDANCE AT MEETINGS.—A. T. Taylor, president, 18; A. Raza, second vice-president, 10; Jas. Nelson, 16; E. Maxwell, 16; A. C. Hutchison, 11; Jas. Wright, 7; R. Findlay, 8; Jos. Venne, 18. Messrs. J. F. Peachy, Chas. Baillarge and F. X. Berlinguet, being residents in Quebec, do not appear on this roll.

The Council cannot close this report without acknowledging its indebtedness to the newspapers for the many friendly and helpful notices they have given of the good work which our Association has at heart.

TREASURER'S REPORT.—The total receipts till September 7th, amounted to $783.47 and the expenses, $748.00, leaving on hand $35.47.

The whole respectfully submitted.

(Signed) A. T. TAYLOR, President.
(Signed) J. VENNE, Secretary.

SECTION OF QUEBEC.

JOS. VENNE, ESQ., Secretary, Province of Quebec Association of Architects, Montreal.

SIR,—The undersigned beg to present the annual report of the Section of Quebec.

On November the 19th, date for election of our officers, Mr. Charles Baillarge was elected President for a third term, and Mr. J. G. Bussieres as Secretary.

Mr. Baillarge was requested to ask His Worship the Mayor of Quebec for a room in the new city hall in which to hold the meetings of our section. Mr. Baillarge made the demand as requested, but the hall that was offered was not accepted by the members of this section, and we consequently decided to hold our meetings, as in past years, in the offices of Mr. F. X. Berlinguet.

On February the 3rd, our section thought proper to indemnify our confrere, J. G. Bussiere, who u til this day had incurred some expenses as Secretary. It was decided to pay him $13.65 in addition to his annual honorarium of ten dollars.

On December 15th, our section asked the Secretary of our Association to obtain from the Council a copy of the "Gallery of Portraits of Past Presidents of our Association" to decorate the rooms of the Quebec Section, but did not receive these portraits.

Our section thinks it necessary to refer back to the resolution concerning the amendments to our charter, as proposed at the last annual meeting held at Chateau Frontenac, as follows: "The first paragraph of Section 13 of 54 Victoria, Ch. 59, is amended in striking off "registered" before the word "architect" in the third line, and to substitute '1898" for the figures "1891" in the first line of said paragraph." That Art. 2a be added at the end of Art. 2 and shall read as follows: "The architect is believed under oath as to the requisition length and nature of his services." Art. 2 is amended in adding after the words "and all other persons" "and only such." Art. 5 is amended in striking off "a Secretary-Treasurer" and replacing them by a "Secretary" and a "Treasurer." The last paragraph of Art 7 is amended by adding after the words "five years" the words "preceding the 1st of July 1898" Art. 19a is added at the end of Art. 19, and shall read as follows: "All architects duly authorized to practice as such in this province shall be obliged to keep and preserve, in a convenient place and proof against deterioration, the original of all plans and specifications made and prepared by them." Art. 19b—Added to the exemption decreed by Art. 556 of the Civil Code of Procedure, "the safes, mathematical instruments, libraries, books of architecture and treat ses on matters relative to the profession of architecture are not seizable, except for their purchasing price."

The whole report respectfully submitted.

(Signed) CHAS. BAILLARGE, President Section of Quebec.
(Signed) J. GEO. BUSSIERE, Secretary Section of Quebec.

QUEBEC, September 9th, 1897.

After the adoption of the report, the members were immediately invited to proceed with the election of their new officers, the result being as follows: President, J. F. Peachy; vice-president, A. Raza; 2nd vice-president, Prof. S. H. Capper; treasurer, E. Maxwell, re-elected; members of Council, A. T. Taylor, C. Baillarge, A. C. Hutchison, J. Nelson, O. Mailloux and L. R. Montbriant.

Mr. A. T. Taylor, in retiring from the President's chair, spoke as follows:

During the last sixty years in science and engineering, old methods have been revolutionized. We are so accustomed to the steam engine, the telegraph, the telephone, gas, electric light and power, that we sometimes forget that these were almost unknown before the Victorian era. Has there been a correspondingly progressive note in architecture? There has been progress, but of another kind. Perhaps I should say movement rather than progress—sometimes forward, sometimes retrograde.

The Gothic revival has come and gone, its chief influence being felt in Great Britain, but influencing in a lesser degree the continents of Europe and America. It forms an interesting chapter in architectural history. Its results have been fruitful. Initiated and fostered by the enthusiasm of Augustus Welby Pugin, and taken up by others, it was lifted up to an equality with the best old work by such men as Sir George Gilbert Scott, George Edmund Street, John L. Pearson, Burgis and their followers. It is for the present a spent force in civil architecture, but in ecclesiastical work it is erecting new cathedrals and churches that for knowledge of style, beauty of form and detail rivals mediæval work, and in the restoration and reparation of old work is on the same high plane. Not the least of the results is an abiding reverence implanted for the old Gothic heritage, and I trust that never again shall we see Gothic shrines degraded, neglected and effaced.

Since then we have had a carnival of styles, Queen Anne, neo-Grec, Egyptian, Jacobean, Florentine, Japanese, Moorish, Romanesque, all attempted in turn, with more or less success, according to the skill of the designer. At last the tide is setting in all over the world for a free classic style, a renewed renaissance, with adaptations from Italian Florentine, French Francois premier and English Elizabethan.

In France Gothic shone with a sunset glow by the perfervid and eloquent writings and utterances, and the consummate draughtsmanship of such great masters as Viollet le Duc and his associates, but since then a renaissance of a distant French type has obtained complete ascendency, marked by a certain refinement and originality, but somewhat lacking in warmth and verve. A country which can boast such buildings as the Louvre and the Tuilleries, the Hotel de Ville at Paris, Versailles and Fontainbleu, the great Chateau of the Valley of the Loire, to be a perennial inspiration to her sons, can never be devoid of a succession of buildings of merit.

In Germany, in Austria, in Belgium and even in Italy, the tendency is indisputably to dignified classic forms, rather than to more picturesque styles.

In the United States the Victorian era has been an interesting one. The old colonial buildings scattered over the country, many of them possessing great charm, were neglected and superseded by a growth of abortions, so outrageous in their design, so contrary to all the best accepted traditions of art that nothing but the crassest ignorance on the part of the profession and the public could have brought them into existence, or suffered them to continue. Within the last fifteen or twenty years, however, a great change for the better was inaugurated, the younger men went over to study in Paris and in England and returned with educated tastes, and many English architects settled in different parts of the States. The result was not always satisfactory, often incongruous and hybrid. Still the trend was decidedly towards vitality

and improvement. What appeared to be one of the most hopeful developments of this time was the romanesque movement, and in the hands of such a master as Richardson, gave not only promise, but fruition of great charm, suitability and beauty. Had he lived longer, a permanent and distinctive style might have been evolved. But there was no one to wear the mantle of the prophet, and, in the hands of numberless followers and imitators, it degenerated, and is not now a live factor in the architecture of today.

The most notable feature of modern work in the States is the close study it shows of Italian, and especially Florentine, Renaissance. The increase of travel, the multiplication of architectural publications, the ease with which architectural and art photographs of every description can be obtained, are largely responsible for this. So close is the study that it often becomes an actual transcript of old work, and it is a curious phase of existing practice that some of the leading architects in the States do not hesitate to plagiarize unblushingly.

Their domestic architecture can be more readily praised, and many country houses have a picturesque charm, a comfort, and a striking suitability most commendable.

To those who crave for originality regardless of other qualities, the development of the sky scraper or high buildings will be an interesting study. It cannot possibly be ignored—cradled in Chicago, it has grown into lusty youth and manhood in the large cities of the States. It is indigenous to the soil of America, and I am glad to say that it has not penetrated to any great extent into Canada, or been transplanted to the Old World. These erections are like the genii that the fisherman evoked and could not control. I do not know of any very high building that its architect can be said to have mastered; they invariably master their designer. Never in the world's history has so many important and costly buildings been erected of so outrageously ugly a character. Were they built for eternity, like the temples of Egypt or of Greece, we might well tremble for our reputation as architects in future ages, but fortunately—dare I say—they bear within themselves the elements of decay. I am satisfied that before long a more enlightened judgment, not to say taste, on the part of the public will condemn all such.

Coming to our own country, I was asked recently: Has Canada, with all her timber and forests and numberless wooden houses, developed any wood architecture? I had to confess that so far as I knew she had not. Since then I have asked myself, is there any reason why she should not? I cannot find any, and I throw it out to-day to you, my confreres, many of whom, doubtless, will have multiplied opportunities of constructing in wood, to take this into your serious consideration. We have often designed for stone and brick and executed in wood. If we study the architecture of the countries which are relatively similar to ours in the abundance of their timber, we may obtain useful ideas. Switzerland, for example, has many old interesting wooden houses well worthy of our study, such as those of Iseltwaldt, Monthovon, Fischenthal, etc. In Norway and Sweden, also, we have charming examples of natural and legitimate wood construction, with ornament not only beautiful in itself but appropriate to the material.

About fifty years ago, and since that time we have had some good architects in Canada—men of refined thought, educated tastes, and a wide knowledge of both classic and Gothic work. In Montreal they gave to us the head office of the Bank of Montreal, the Bank of British North America, the old Court House, the English cathedral, and other buildings. In Ottawa the original block of the Parliament buildings. In Toronto the main building of the University, and others there and elsewhere.

Succeeding these, diversity has reigned—a straining after originality, a new style which often resulted only in uncouth, ill-proportioned buildings, with badly designed detail; but of these I need not further particularize. Since that time, however, better training has produced better and more refined architecture, and gives promise of greater achievements in the future.

The establishment of a regular chair of architecture, through the munificence of one of our honorary members, Mr. McDonald, at our great University of McGill at Montreal, and the filling of that chair by a gentleman, now one of our number, who is an enthusiast in his work, well trained in the art traditions of the past, and who brings energy and the strength of his manhood to the training of students of architecture, augurs well for the future of our beloved profession.

Older countries have the advantage of having numerous examples of old, good work ever before the eyes of their architects. This is a comparatively new country. We have few antiquities of any kind, whether historical or architectural. What we have got it is our bounden duty to jealously guard and preserve. Indifference, ignorance or personal interest have been the factors which have robbed us of many an interesting piece of antiquity in Montreal. In this delightfully quaint and picturesque city of Quebec, full of the charm of antiquity and historic interest, and to which it is always a pleasure to come, permit my humble voice to say: Cling to everything that makes your city interesting from an antiquarian point of view. "Grapple them to your souls with hooks of steel." Already much of the full flavor and antique aroma has been lost; let no more go, as you value your noble heritage. Your old gates are nearly all gone, and only live in drawings and models preserved in the Redpath Library in Montreal. On a recent visit St. John's gate was in process of demolition; although not an ancient gate it is worth preserving. Another scheme contemplates levelling a portion of your old city walls, which, I trust, the good sense of the citizens will never permit. Many a city would give much to possess your glorious legacy from antiquity.

All over the province the quaint old village churches with their golden spires are being replaced with structures—many of them exceedingly pretentious and "towny," if you will permit the word. Not long ago in a small village I counted five towers and spires on one church, surely adjuncts unnecessarily abundant in a country parish. Personally, I regret to see the disappearance of the simple rural church hallowed by many years of worship and round which the social life of many generations has been nurtured.

Fellow members, let us broaden our minds with an enlarged knowledge of the sister arts—painting, sculpture, archæology, and the industrial arts, as they touch and affect our profession; nothing is too trivial in our work for the genius of art to beautify. The higher our ideals the better will be our work. It may not be appreciated now as it ought, but some time it will. Many noble buildings have come down to us from antiquity—the very name of their architects often unknown, and yet they have been a joy and an inspiration to countless numbers. I sometimes think we have the best and most interesting profession in the world. We touch life at so many points; we have so much power in our hands to sweeten and enrich the existence of our fellows. Let us accept our work as a sacred trust, not as a means simply of making money or gaining a livelihood. Let us rally round our Association; it must prove mutually helpful to ourselves and to the community at large.

The members were then called to discuss the proper measures to be taken in order to protect more effectively the licensed and duly qualified architects against the competition of unqualified persons who arrogate to themselves the honorable title of architect without being able to give an equivalent for the fees which they exact. It was generally admitted that it was time for the Association to act for the good of its members in this direction, otherwise it would soon have no standing.

The new Illinois architect's license bill, as published in the last number of the CANADIAN ARCHITECT AND BUILDER, and which has for its object the organization of a state board of examiners of architects with all the ordinary powers given to a committee of this kind, was given as an example of what ought to be done in the province of Quebec.

After a lengthy debate lasting till the luncheon hour, and resumed after luncheon till 3 o'clock in the afternoon, the question of amending the charter in that sense was left to a special committee composed of Messrs. Berlinguet, David Ouelett, Baillarge, Tanguay, J. Z. Resther, Maurice Perreault and J. Nelson, with all the general officers of the Association, with power to add to their number if necessary. This committee is instructed to report to a general meeting of the Association in Montreal, early in November next. Another meeting of the Association will also be held in the city of Quebec sometime before the opening of the Legislature.

On the proposition of Mr. Hutchison, seconded by Mr. Mailloux, it was decided that the next general annual meeting of the Association will be held in the city of Montreal at a certain date to be fixed by the Council. This closed the regular business session.

The next item on the programme was a lecture by Prof. S. H. Capper, of McGill University.

The following is a resume of Prof. Capper's lecture. The full text of the address will be presented in our next issue.

Mr. Capper took as his subject "Architectural Notes on New York Tall Buildings," and treated it with a view to initiate some general discussion among the members of the Association. He first commented on "towering" as an ideal in art, exemplified in the architecture of America by the tower of the city hall at Philadelphia, and by the memorial obelisk at Washington, both of exaggerated height, but not otherwise remarkable as artistic efforts. The former to obtain its actual height was distorted in design; the latter was a reductio ad absurdum of the ancient Egyptian monolith.

The tall buildings of New York and other American cities must be accepted as the outcome of modern requirements, due principally to the enormous initial cost of the sites available. The engineering problems involved were many and complex, but they were being solved with the greatest skill by contemporary engineers. The aesthetic problems involved were no less difficult, and did not offer so easy or complete a solution. The lecturer reviewed the modern "tall building" as developed in New York, criticising it from the architectural and aesthetic standpoints; he dealt with the question of ornamentation and incidentally discussed the question of concealed steel skeleton construction and the employment of stone as the material for casing in the constructional metal frame. The horizontal and vertical principles of design for these buildings were contrasted and compared, the lecturer favoring the former; and the isolation which allows these buildings to be judged of as a whole was also noted. In conclusion reference was made to the general effects of these buildings, now that their number has so largely increased, upon the aspect of New York itself as seen on approaching the city from the harbor.

After some congratulatory remarks of the new president of the Association, Mr. J. F. Peachy, and a cordial vote of thanks to the lecturer for his scholarly and instructive lecture, the President called for a discussion upon the subject of the paper.

Mr. Venne said that the aesthetic problem of the construction of the tall building was a very hard one to solve, but he would assume without risk of mistake that the "sky-scraper" of New York and Chicago was far from having the aesthetic aspect of the architectural masterpieces of the European cities. Near by these towering buildings, monuments like "La Magdeleine" and other grand cathedrals of the old world would suffer in their artistic appearance. If the cathedrals of "Notre Dame de Paris" and of Amiens were placed beside those sky-scrapers of New York and Chicago what would they look like? There was a diversity of opinion regarding the necessity for these tall buildings. Personally, he thought they were unnecessary, and was of opinion that architects and builders would before long return to normal conditions of building.

Mr. Venne, who was mentioned on the programme as the next lecturer, in spite of the lateness of the hour and the fact that he had unfortunately left his manuscript behind, gave from memory and with the aid of a few notes written at the last moment, his lecture on "The Aesthetic Function of Mouldings and Profiles."

By the courtesy of the author our readers will have the privilege of reading the full text of this paper.

Prof. Capper had taken for his subject a question of ensemble so to speak; Mr. Venne said that he had chosen to treat and discuss a subject of details: the mouldings and their object and effect in architectural art.

Thanks were given to the lecturer by the President, Mr. Peachey, in the name of the Association.

Mr. Hutchison asked permission to make some few remarks on the lecture of Prof. Capper. He said that tall buildings in the cities of Chicago and New York were in many cases no more nor less than gigantic and monstrous boxes. They were nothing else than engineering feats. If you ask the architects of those tall buildings how they are determining the proper architectural treatment to give to such buildings, they will say in many cases that they are considering and treating these towering constructions as mere columns, dividing them with regard to ornamentation into the three distinct parts of a column —the base, the shaft and the cap. Mr. Hutchison said that the tall construction was at an experimental stage, and it was not easy to decide about the proper treatment it ought to receive. Steel and iron were more and more in use in buildings. Architects in their designing ought to deal with these materials in such a way as to make them more pleasant features in construction.

Mr. Andrew T. Taylor, the ex-president of the Association, spoke of the threatening danger of these tall constructions in iron and steel. These materials are exposed to rust, and, being covered, the action of rust cannot be easily detected. In some fifty years from now a sudden collapse would certainly happen in many cases, if proper and timely measures were not taken to prevent it. He predicted that in less than one hundred years from now most of these tall buildings will be no more, while the tall monuments and constructions in stone of the old world—those of ancient Egypt, for instance—are still standing, after three thousand years of existence.

The President reminded the members present that they were expected to attend without fail at the annual banquet, at 7 o'clock p.m., at the Victoria Hotel.

ANNUAL BANQUET.

The annual dinner was a very sumptuous and enjoyable affair, the tables being beautifully ornamented with tropical plants and flowers. The banquet was given in the private dining-room of the hotel, and was served in a manner that left nothing to be desired and that reflected great honor upon the management. It included all the delicacies of the season, as the following menu will show:

MENU.

Huitres en Coquilles

SOUPE.

Consommé à la Royale.

POISSON.

Saumon Frais, Sauce Hollandaise. Pommes de Terre Pailles.

ENTREES.

Timballes de Poulet à la Reine. Filet de Bœuf, piqué aux Champignons.

ROTIS.

Dindonneau farci, Sauce aux Atocas. Gigot d'Agneau a la Parisienne.

MAYONNAISE.

Homard. Poulet. Laitue.

LEGUMES.

Pommes de Terre à la Creme. Haricot Verts a l'Anglaise.

Celery. Petits Pois a la Francaise. Asperges.

ENTREMETS.

Victoria Pudding, Cognac Sauce. Bavaroise au Chocolat.

Tartes Assorties. Geleé au Champagne. Gateaux Assorties.

DESSERT.

Raisins. Noix Assorties. Amandes. Pommes. Poires.

Raisins de Serre. Creme à la Vanille.

THÉ. FROMAGE. CAFÉ.

Those present were: J. F. Peachey, President; A. T. Taylor, Alex. Hutchison, Jas. Nelson, O. Mailloux, Professor Capper, J. Z. Resther, Jos. Venne, A. Raza, D. Ouellet, G. Tanguay, E. Dussault, C. Dufort, J. A. Monette, J. P. Ouellet, architects; J. B. Mortimer, of the CANADIAN ARCHITECT AND BUILDER; N. Levasseur, secretary of the Chamber of Commerce of Quebec; T. Moloney, of the Provincial Secretary's Department; Mr. Barthe, editor of La Semaine Commerciale; Mr. Carrel, of the Daily Telegraph; Mr. Chambers, of the Morning Chronicle; G. Levasseur, journalist; and some other representatives of the press of the cities of Quebec and Montreal. General regret was expressed at the absence of Messrs. Baillarge and Berlinguet, who had been called out of the city by professional engagements.

After a couple of hours had been devoted to the delicacies of the menu, the guests were called on to honor the official toasts, as follows :

1st. "The Queen." In proposing this toast the President, Mr. Peachey, made allusion to her glorious jubilee.

2nd. "The Governor-General, Patron of the Association." The President spoke briefly of the manifest sympathy of His Excellency, Lord Aberdeen, with the Association, having graciously accepted in the course of the year the title of patron.

3rd. "The Government of Quebec." In the absence of any members of the Provincial Government, Messrs. Barthe and Maloney were charged by the President to reply. Both speakers did not hesitate to pledge the assistance of the government to the Association in its efforts to secure needed amendments to its charter.

4th. "Sister Associations." Professor Capper, called by the President to reply to this toast, said that, according to what he had heard from the Secretary, the sister associations were not very sympathetic. The sister association of British Columbia had not answered the call of the Association of the province of Quebec to second a movement for the formation of a Federal Institute of Architects, and the answer of the sister association of the province of Ontario did not amount to much.

Mr. Hutchison thought proper to say that it would not be fair to accuse the sister associations of Ontario and British Columbia of indifference or apathy. He was sure that they were at heart and in spirit with their sister association of Quebec. Their aims and objects were the same, but the distance at which they were separated from this association had doubtless much to do with their seeming indifference.

5th. "The Press." Suitable responses were made to this toast by the representatives of the CANADIAN ARCHITECT AND BUILDER and the local press.

A toast to the health of the absentees, Messrs. Berlinguet and Baillairge, was afterwards proposed by Mr. N. Levasseur, and replied to by Messrs. Raza and Venne.

The proceedings terminated with a toast to the health of the President of the Association, proposed in forceful terms by Mr. Chambers.

SECOND DAY.

On the morning of Friday, the second day of the convention, carriages were in waiting at the Victoria to convey the members of the Association to the station of the Quebec, Montmorency and Charlevoix Railway. The ladies, who had been unavoidably neglected to some extent the day before, were invited to participate in an excursion to the famous shrine of Saint Anne de Beaupre, passing on their way the Montmorency Falls.

They were in the celebrated sanctuary by 11 o'clock, viewing its sumptuous altars in marble, monument to Saint Anne in Mexican onyx, its historical treasures, and pyramids of crutches, left there by miraculously cured pilgrims. Full explanations were given to the visitors by one of the good fathers of the church. Every member of the Association, especially the strangers, seemed to be interested to the highest degree.

Visits were afterwards paid to the old sanctuary, the Fountain, the Scala Sancta, and the village itself, with its numerous and extensive hotels. Everything is historical in the surroundings here. A passer-by sees the remains of old fortifications erected before the siege of Quebec, under the French.

Mr. Francois Parent offered the hospitality of his sumptuous home, where the visitors were received most cordially by Mrs. Parent. Part of the residence of Mr. Parent was used by Montcalm as his headquarters during the siege, and history states that the treaty of capitulation was even signed there. Mr. Parent, who is now the proprietor of an extensive brewery, is a mason contractor by trade. He offered a toast to the health of the architects, and in particular those of the Association.

Mr. Andrew T. Taylor offered the sincere thanks of the Association to Mr. Parent, and said that he was particularly impressed by feeling that he was speaking in the very room where such an important event as the capitulation of Quebec had been decided and the treaty signed.

At 3 o'clock, after luncheon, the members of the Association took their final drive. On account of the late hour, they had unfortunately to shorten it. Nevertheless, it was interesting. They passed by the heights of Ste. Foye, and the village and church of that name, to the famous cave, on the shores of the river, above Sillery Cove, used by a celebrated Canadian brigand called Chambers in 1837, and were shown at a little distance the site of the proposed new bridge for railway purposes between the north and south shores of the St. Lawrence at Quebec.

At six o'clock they were back to their headquarters. Most of the Montreal members were leaving the same night by rail.

The ladies who favored the tourists with their presence on the excursion were Mesdames Nelson and Levasseur and Misses Mailloux and Dufort.

PERSONAL.

Mr. George Wilson, a prominent contractor, of New Edinburgh, Ont., died recently at his home in that place.

Mr. Wm. Rae has recently been admitted as a partner with the firm of Strickland & Symons, architects, Toronto. The firm will in future be known as Strickland, Symons & Rae.

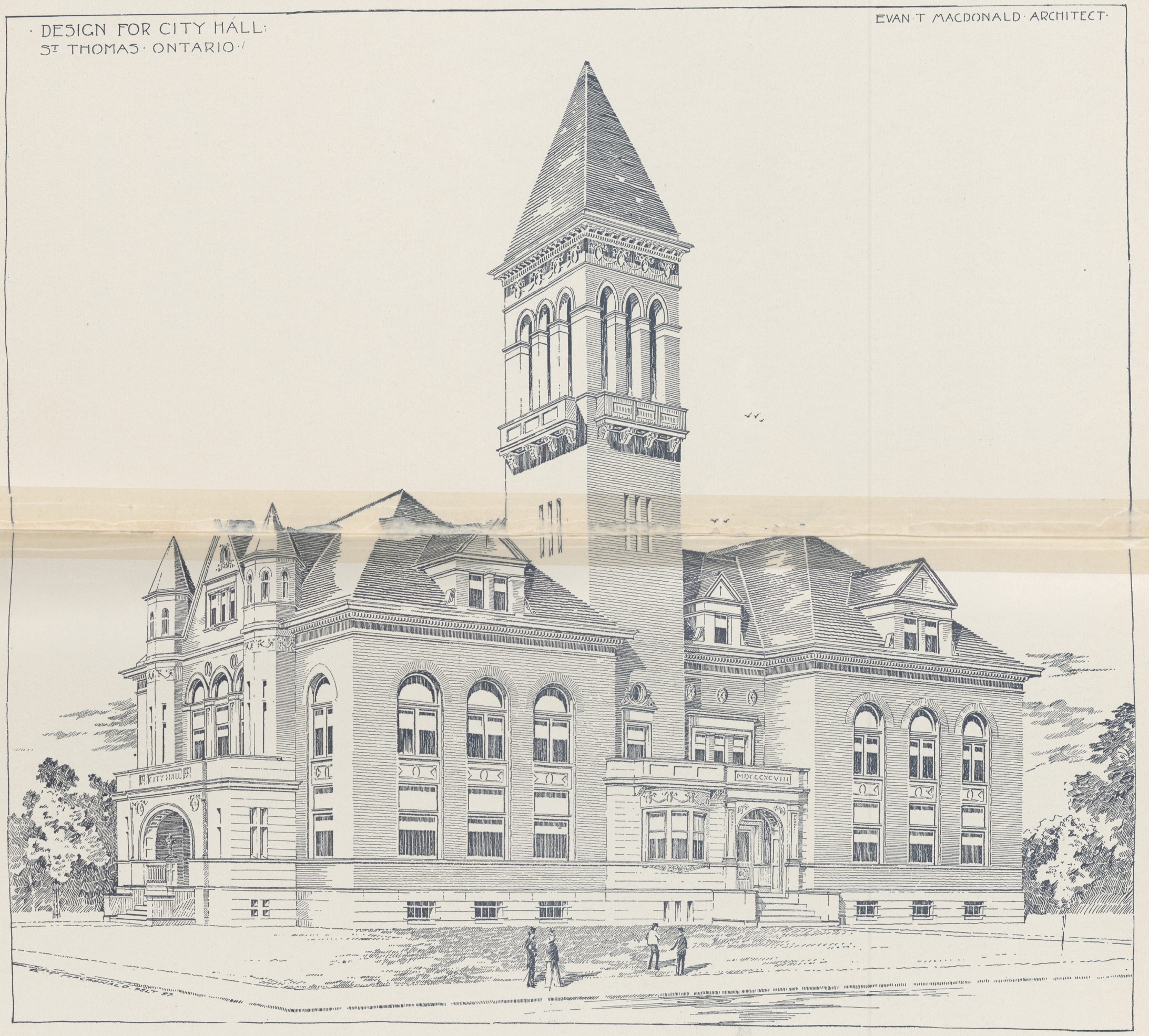
Mr. Walter Chapman, C. E., of Barrie, has been appointed chief engineer of that department of the Grand Trunk Railway extending from Toronto to Nipissing and westward to Detroit. Mr. Chapman's headquarters will be at Hamilton.

Mr. Ernest R. Rolph, architect, of Toronto, has removed to the Northwest territories, having received an appointment from the C.P.R. to design and superintend the construction of buildings in connection with the Crow's Nest Pass railway. Mr. Arthur E. Wells, who has been in New York city during the last five years, has returned to Toronto and assumed charge of Mr. Rolph's practice.

The death occurred at Montreal last month, of Mr. Frederick Preston Rubidge, who was for thirty years architect of the Public Works Department at Ottawa. Mr. Rubidge had attained the age of ninety-two years. He retired from the public service in 1872, afterwards removing to Hamilton and later on to Montreal. He was highly esteemed both on account of his personal qualities and the ability which he displayed in the practice of his profession.

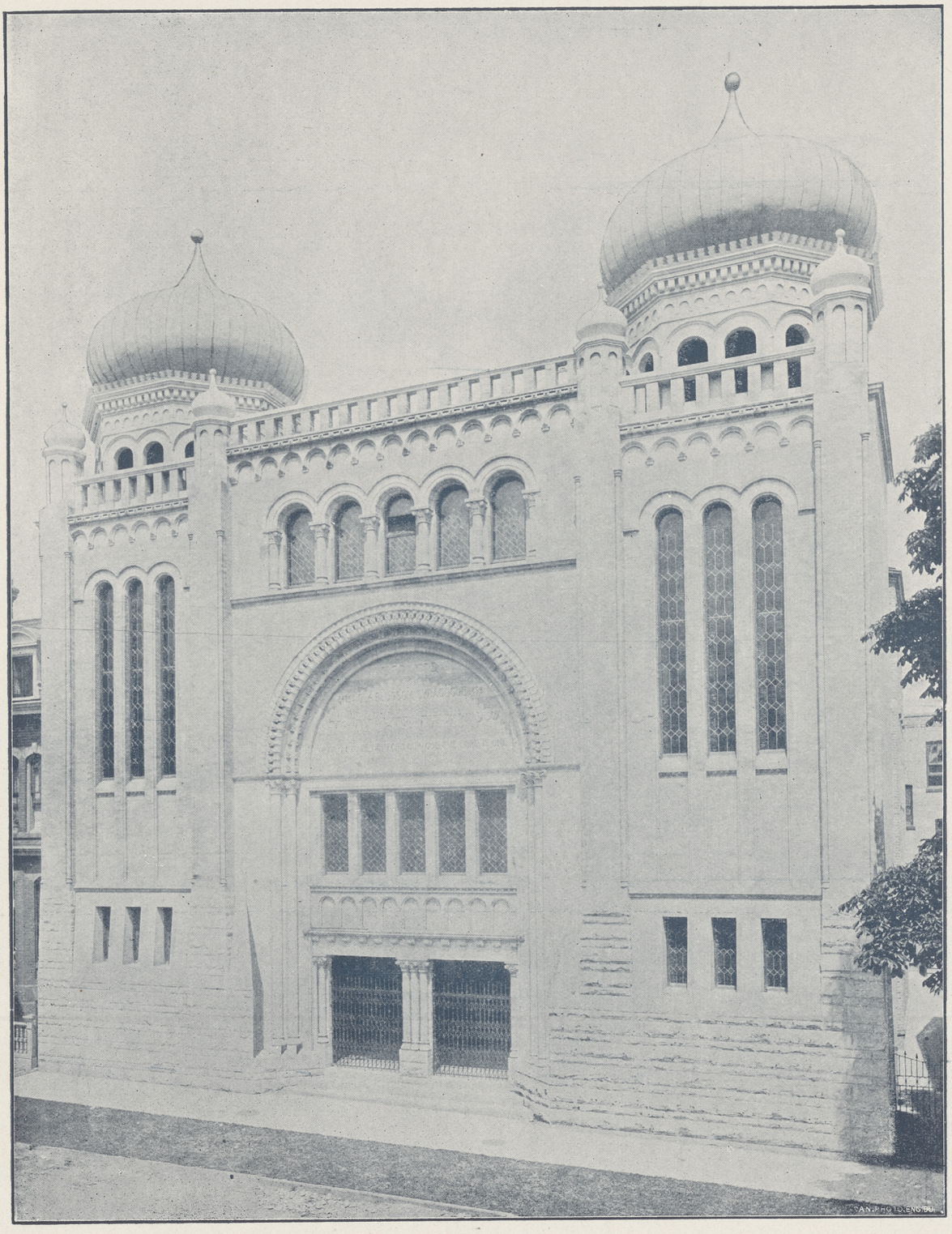
Thomas Heaven, of Hamilton, Ont., has recently patented in the United States and Canada a furnace that is said to be capable of burning all kinds of fuel, such as wood, hard or soft and lignite coal. The furnace is largely constructed of steel.

Incorporation has been granted to the St. Lawrence Portland Cement Co., with a capital of $25,000. The charter members of the company are: E. S. Scott, Quebec; M. J. Butler, Napanee; F. G. B. Allan, Napanee Mills; R. C. Carter, Kingston; F. S. Rathbun, Deseronto, and J. N. Greenshields, Montreal.



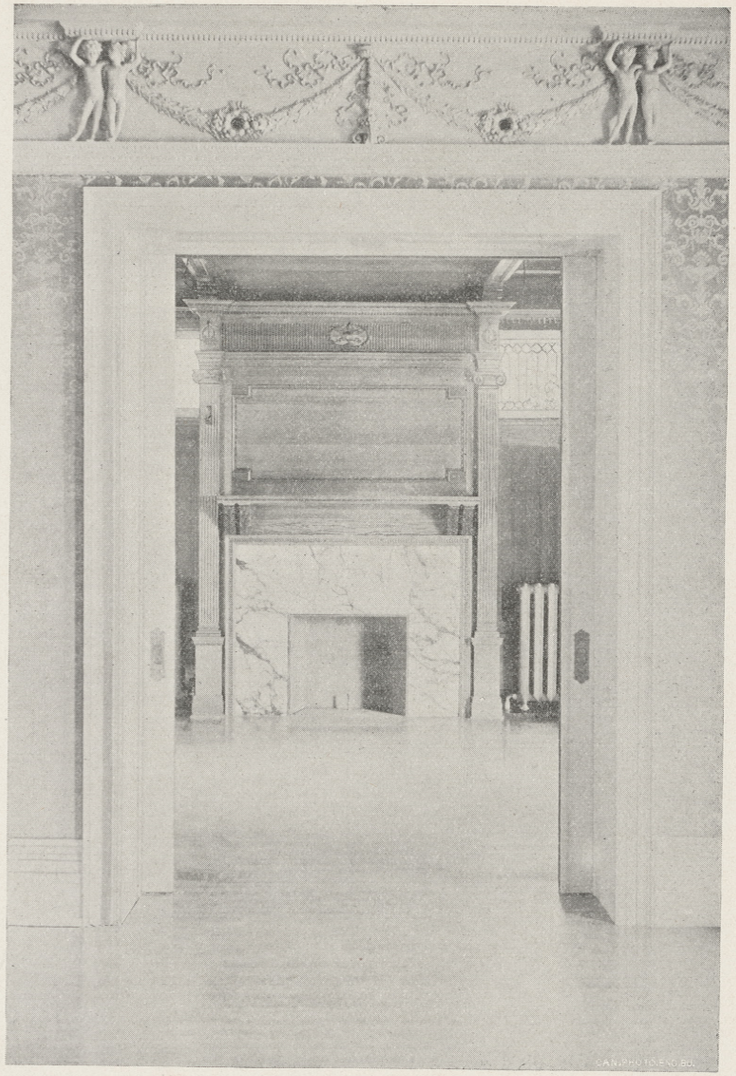
DESIGN FOR CITY HALL, ST. THOMAS, ONTARIO.

EVAN T. MACDONALD, ARCHITECT.



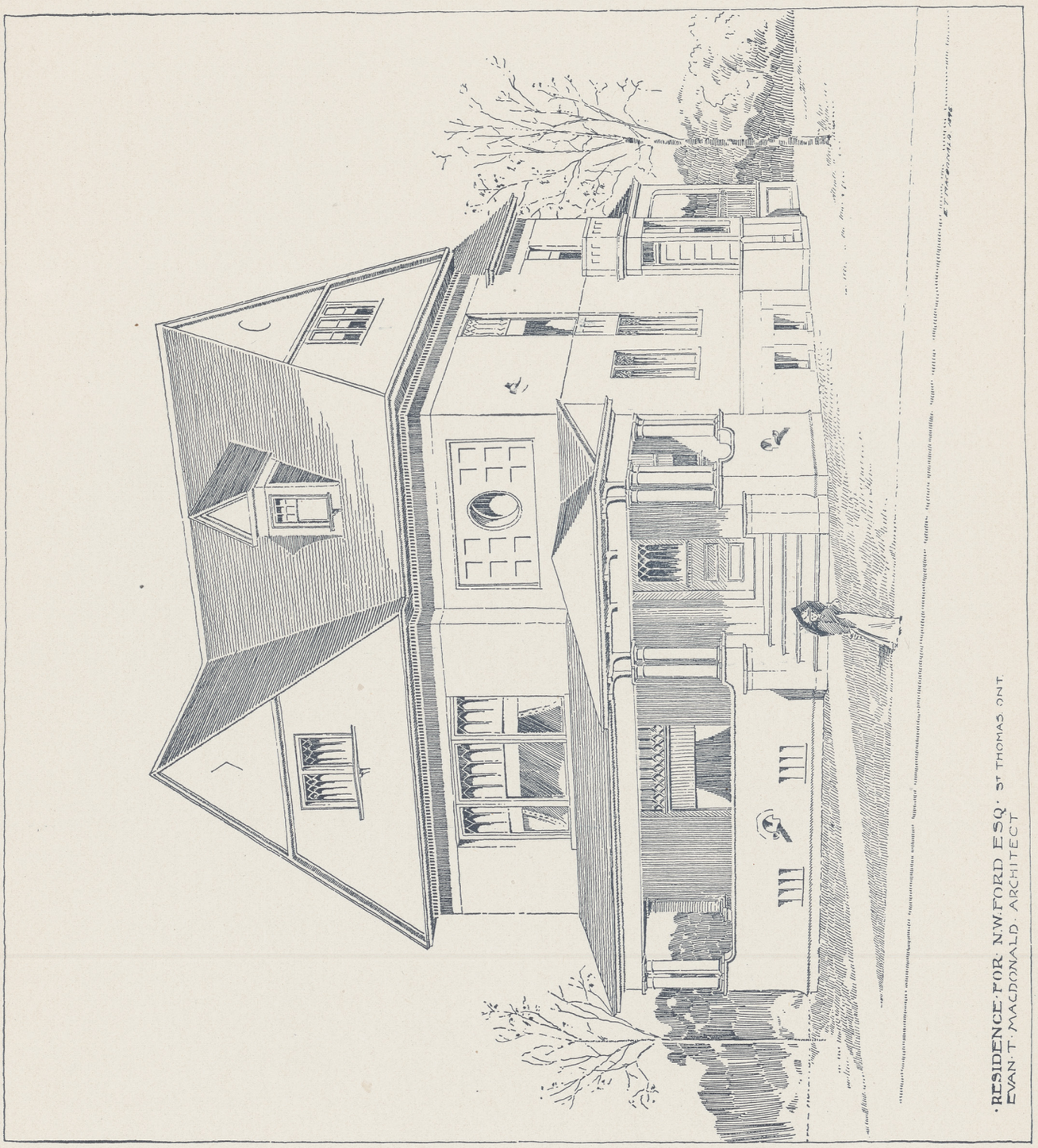
HOLY BLOSSOM SYNAGOGUE, BOND STREET, TORONTO.

J. W. SIDDALL, ARCHITECT.



INTERIOR VIEWS IN RESIDENCE OF MR. M. J. HANEY, ROSEDALE, TORONTO.

ERNEST R. ROLPH, ARCHITECT.

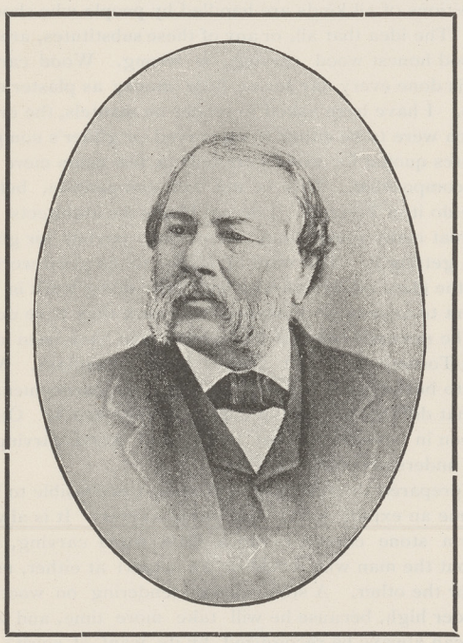


RESIDENCE FOR N.W.FORD ESQ. ST THOMAS ONT
EVAN.T.MACDONALD. ARCHITECT

THE LATE MR. F. J. RASTRICK.

It is with deep regret that we chronicle the death of Mr. F. J. Rastrick, of Hamilton, one of the oldest and most highly respected architects of Canada. In the early days of the Ontario Association of Architects, Mr. Rastrick was one of the most enthusiastic and useful of its members. In recognition of this fact he was appointed by Order-in-Council a member of the first Council. Of late years, owing to advancing years and physical infirmities, he was unable to take an active part in the work of the Association.

The deceased was the third son of John Urpeth Rastrick, civil engineer of Layas Court, Surrey, England, and was born at Westbromwitch, Staffordshire. He received his education in Yorkshire and London; then entered his father's office to study civil engineering, and afterwards was articled to Sir Charles Barry, F.R.I.B.A. At the expiration of his term of five years he was elected a student of the Royal Academy. He then went to Belgium to measure and make drawings of St. Jacques church, Leige, for Weale's Quarterly. He afterwards studied in Paris, Rome, Vienna and Munich, and travelled over Europe, Asia and Egypt, perfecting himself in his profession. He returned to England in 1848. In 1850 he opened an office in London, and in 1852 came to Canada and located in Brantford. From that city he removed in 1853 to Hamilton, where he continued to reside during the remainder of his life, and designed and superintended the erection of many important buildings. He was also largely instrumental in establishing the Hamilton School of Art. He was a Past Master of Acacia Lodge, A. F. & A. M.;



The Late Mr. F. J. Rastrick.

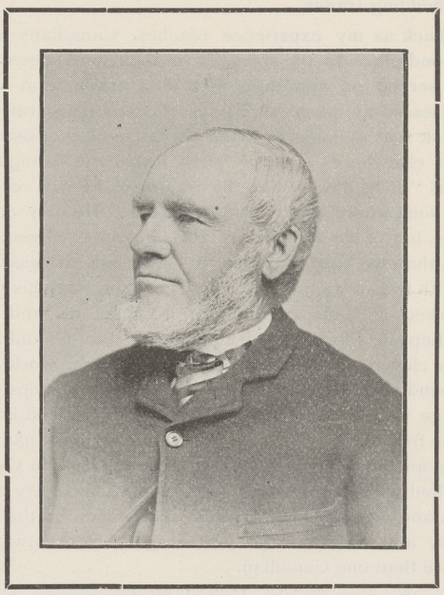
President of St. George's Society during four years; President of the Mechanics' Institute for a like period; Past and Vice-President of the Sons of England, and a life long member of the Church of England. Mr. Rastrick was married on the 21st of July, 1857, to Anna Mary, daughter of Capt. E. L. Stephens, R. N., of Southampton, England. He leaves a family of one daughter and four sons, one of whom, Mr. E. L. Rastrick, succeeds to his practice.

Messrs. Brown & Temple, Brockville, state that the Architect and Builder and Contract Record is the best $2 investment any firm connected with the building trade can make.

THE LATE MR. ROBERT MITCHELL.

The recent death of Mr. Robert Mitchell, brass founder, removes a prominent landmark from the ranks of business men of Montreal. The accompanying portrait will recall to the minds of many of our readers his familiar features, as well as his long and useful business career.

The late Mr. Mitchell was at the time of his death in his seventy-sixth year. He came to Canada from Scotland, his native land, in 1848, and engaged with Messrs. Bryson & Ferrier, of St. Paul street. In 1851



The Late Mr. Robert Mitchell.

he commenced business on his own account on St. Henri street. Six years later he removed to the corner of Craig and St. Peter street. In 1889 these premises had become too small and a commodious factory was erected at St. Cunegonde, the former premises being used as offices and show rooms for gas and electrical fixtures and other lines of brass goods. In 1893 the offices and show rooms were removed to their present location at No. 8 Bleury street.

Subsequently the business was merged into a joint stock company, under the name of Robert Mitchell & Co., Limited.

In addition to many first-class private residences, Mr. Mitchell fitted up the following public buildings: City Hall, Post Office, Street Railway offices, Y.M.C.A. building, Imperial and Standard Insurance buildings.

The late Mr. Mitchell took no active part in public affairs beyond serving as governor of the Montreal General and Western Hospitals, and being connected with the Board of Trade. He leaves a widow, two sons, Messrs. Richard and Norman Mitchell, both of whom are connected with the company, and three daughters.

Mr. W. A. Reynolds, of Hensall, Ont., in remitting his subscription, writes: "I am well pleased with the Architect and Builder and Contract Record, and wish the paper every success."

Under section 74 (2) of the London Building Act it is necessary that in every building exceeding 10 squares in area used in part for purposes of trade or manufacture and in part as a dwelling-house, the part used for purposes of trade or manufacture shall be separated from the part used as a dwelling-house by walls and floors constructed of fire-resisting materials, and all passages, staircases and other means of approach to the part used as a dwelling-house shall be constructed throughout of fire-resisting materials.

CORRESPONDENCE.

[Letters are invited for this department on subjects relating to the building interests. To secure insertion, communications must be accompanied by the name and address of the author, but not necessarily for publication. The publisher will not assume responsibility for the opinions of correspondents.]

A WOOD CARVER'S VIEWS.

To the Editor of the CANADIAN ARCHITECT AND BUILDER.

SIR,—The people of Canada appear to be at last awakening to the fact that they have a grand country—worthy to be classed among the nations of the earth—and that they are possessed of all the qualities that make for success, in quite as marked a degree as the people of any other nation. It is to be hoped that this feeling of self-confidence and respect will grow, until it reaches even the building trades.

As far back as my experience reaches, Canadians have been given second place to the stranger in their own country. The boy who served an apprenticeship to a trade, and who most likely possessed as much ability as the stranger, was forced to take a back seat at home, or leave his native land in search of appreciation elsewhere. I have often heard the stranger tell the native that "If he did not like the treatment he was receiving he could go somewhere else," and he went. He may come back some time, but, if we wish to retain him as a citizen, we must show him that we are prepared to give him at least an equal chance with the stranger, and that we appreciate his worth. I have worked in some of the best architectural and furniture carving shops in Canada and the United States, and have met some very clever workmen from all parts of the world. I have always found the Canadian in the United States shops receiving the average wage, and in some cases reaching and holding his own in the front rank. I have never known a Canadian to be occupying an inferior position anywhere, except in Canada. I have worked with as many as one hundred and sixty carvers in one shop, and among those who lost least time, did the most and best work, and received the best wages, were always to be found more than one Canadian.

If this is the case in the United States among men of all nationalities, why is it not so in Canada? Because we do not give the Canadian the same chance. We have always been too ready to extend the "glad hand" to the foreigner, with the idea that, coming from the older country, he must know more than we do. As soon as he arrives there is always someone to help him into the position that rightfully belongs to the boy who learned his business with us.

Some ten years ago there were gathered together in New York city the greatest collection of wood carvers ever seen anywhere—some of the best men from Italy, France, Germany, England, Scotland, and, of course, Ireland—in fact, they came from all countries and were of all grades. Mr. Philip Martinz, who did so much of the best work at the World's Fair in Chicago, was one of them, and was not regarded as the best by any means. The work was of the very best class of Italian Renaissance, and rivalry ran high. As soon as something was produced that was looked upon as good, the others would set themselves to produce something better, and every week or so a piece of work was turned out by someone, that was voted by all, "best yet." Of course the Italian was generally first, with the Frenchman a close second—all others scattered. The Canadian and United States carvers were quick to seize their opportunity, and it surprised everyone how quickly they picked up the loose ends, and, step by step, bettered their position in the ranks, until, when the end came, and they were all scattered far and wide, the carvers of this continent were working shoulder to shoulder with the picked men from all Europe, receiving the same wages as the best of them, which is positive proof that they did as good work.

At the same time that the carver was proving himself as good as his brother, the carpenter and cabinet-maker had been passing through a similar experience, and came out of the test with their heads up.

It is a well-known fact, to all who have worked in the United States, that some of the best men in the furniture trades are Canadians. In the best shops in Boston, New York, Cincinnatti, Chicago, Grand Rapids, Canadians are to be found in one or more departments, filling the position of foremen, and in some cases the manager and foremen, from top to bottom, are all Canadians, and most of those who hold these positions, also hold honorably cancelled indentures of apprenticeship from Jacques & Hay, of Toronto, although I have met some from Bowmanville, Oshawa, London, Montreal and Quebec. One of the most successful furniture manufacturers in Grand Rapids, Mr. John Mowat, is a Canadian and a Jacques & Hay apprentice.

It is not, therefore, for any want of ability that Canadians do not remain at home, but entirely from lack of opportunity and because of the lack of faith in their ability. The manufacturer, the architect, and business man generally, are largely to blame for the existing state of things. They have in the past given the preference to men from the old countries, being Old Countrymen themselves. As a rule, they could not be induced to believe that the boy brought up in the bush could possibly have as much knowledge as the mechanic from "home." So, when a stranger landed here, unknown and poor, who claimed to be a builder, for instance, he was taken in hand and helped along. The bank helped him, the architect gave him his confidence, and he became known as a "successful contractor." In some cases he was a good fellow, and is with us yet; in other cases he left us monuments of his ability in the shape of unfinished blocks of buildings and unpaid claims; while the Canadian, who stayed at home and tried to establish a business for himself, was looked upon as a man of little experience or ability, and left to do the best he could.

I have tried to show by all this, that we have, in the past, neglected to encourage our own people, while we have freely helped the foreigner. We depreciated our own ability, and failed to inspire others with confidence in us, because we lacked confidence in ourselves. If an expert opinion was required, we sent to some foreign country for it, and paid a large price for it.

This is not the way to build up a country, and the sooner we make a change in our methods, the better it will be for us all. Canadians should have the first say in all matters which affect Canada. Canadian architects, engineers and experts should be consulted in preference to foreigners. I am looking for the good time that is coming for us all, when good, honest work will be asked for, and the man who will give the best class of work, for a fair price, will be considered the best man to deal with. In these days of competition, it is the man who will do work cheapest who is looked upon as the best man to employ. The wood carver suffers in this way. The good man has not only to compete with the cheap man, but has to contend with all sorts of substitutes. Compositions of all kinds are handled by people who should know better. The idea that all, or any of these substitutes, are cheaper than good honest wood carving, is wrong. Wood carving can be and is done every day for as little money as plaster ornament is made. I have been asked to tender on mantels, the ornaments for which were to be either wood carved or gilder's composition; the figures quoted for wood were only a few cents more than the cost of composition. This is not fair competition, but it is the way we do it in Toronto. I do not blame the architects, because, for a great many years, they have been paying for good work and not getting it. The want of ability to do good work, on the part of the class of carvers who have been doing work in Toronto, is evident to anyone who inspects the work they have done; and it must be remembered that the carvers who have been doing the work in Toronto have not always been Canadians. Men have gone into business for themselves, who, as journeymen, found it somewhat difficult to keep up their end at the bench. Others who have been in business did not understand wood carving as well as they understood stone carving.

I am prepared to prove that it is almost impossible to be at the same time an expert wood and stone carver. It is always possible for a stone carver to do a little wood carving, and vice versa, but the man who would be an expert at either, must stick to one or the other. A stone carver tendering on wood carving will tender high, because he will take more time, and when it is done it can always be recognized, by its want of spirit; it lacks that lively, sketchy appearance, which the expert wood carver could give it. It was this "artistic indifference" in the treatment of the wood carving, by the Italian carvers who worked on the Vanderbilt work in New York, which surprised the stone men into the admission that the wood work was far superior to the stone.

The architect who has been fighting for good work at a fair price, has generally got rubbish at a high price. The method of asking for tenders, and giving the work to whoever is lowest, is not calculated to produce the best results, neither is the method of bolstering up one man, as being the only one who can do good work. Another way of doing it is to let the contract for all wood work, including carving, to a builder. Say that it is estimated that there is $500 worth of wood carving on the job. The builder will sub-let the carving to the man who will do it cheapest, and save probably one-third of the original estimate. This method

will not produce good work. Another way is to ask a builder for an estimate and give this estimate to all builders tendering, with the understanding that the carver who gave the estimate is to do the work. When the builder signs the contract he takes the liberty of handing the carving to someone else, who will do it cheaper. The architect who allows this cannot expect to get value for his money. If the builder employed his own carvers, and could satisfy the architect of his ability to do as good work as he who gave the original estimate, it would not be so bad, but it is not right in any case. Another reason why good work is not done, is because some architect will ask for tenders on a scale drawing, and when the details arrive, the carver finds himself in a good-sized hole; he is afraid of getting the worst of it, and slights the work, making trouble all round.

Estimating on the value of carving, from a good drawing, is guesswork at best. The carver estimates according to his interpretation of the drawing, but if he has to compete with cheap men, he has to guess how low he can go without getting stuck, and how high he can go and get the work, for if he is not lowest, he is not likely to get it. He seldom estimates on the real value of the work. It would be better if the architect would consult the carver as to how much and how good he could do the work for so much money, and let it go at that, seeing to it that the carver lived up to his agreement. The fact of the matter is, that no man can tell the value of a piece of carving before it is done. It may take a day to do a piece of carving in a fairly effective way, and a week can be spent in doing the same piece of work. The size of work does not count half as much as the way it is done.

A change in the method of estimating the cost of carving would do away with many of the evils. If an architect gave an order to do certain work for a certain amount of money, it would be to the carver's best interests to give him full value, and carry out his ideas. I have known work to be done in this way that resulted in a saving on the original estimate. There is one shop in New York where this plan is adopted, and the result has always been satisfactory. It is necessary to this end, however, that the carver should be capable, as well as honest. The architect who is known to be easy to please, will not have to pay as the man who is known to be hard to please, neither will he who is known to be easy get as good work. I like the man who is particular about the quality of the work he is getting, providing he will say so from the start, and show clearly what it is he wants. But when an architect tries to get a low estimate by submitting a scale drawing and saying, "I don't want anything too fine," etc., etc., and then finds fault with the work he is getting, he is not doing himself justice, nor does he get the best results. It is to be hoped that the architect and his carver will put their heads together, and arrive at a better understanding. Then we will get better work, and there will be less trouble, while, as a consequence, there would be as much likelihood of a reduction as of an increase in the cost of the work.

Yours, &c.,

W. N. McCORMACK.

12 Lombard street, Toronto.

THE MARITIME PROVINCES.

(Correspondence of the CANADIAN ARCHITECT AND BUILDER.)

BUILDERS in general throughout this section are congratulating themselves on having had a fair season's work. Though no buildings have been erected of great importance during the summer, yet sufficient work has been carried on in buildings of a smaller order and in repairs made, to keep all the workmen busily employed throughout the season. In all building lines one hears, in answer to query, "can't complain."

Early in the season the building fraternity watched with interest the issue of the popular movement in favor of a free public library. Had the city accepted the site offered by would-be philanthropic donors probably the money would have been forthcoming for the erection of the library. As it was their delay caused the withdrawal of the offer, and chances are that if the project is carried out another year the site must be purchased. Many still believe another year will see its fulfillment, and it seems pretty well understood that in such a case the design must be of an order to be a decided addition to the beauty of the city.

The works of the present, the construction of the big docks and warehouses on the Carleton side of the harbor are very extensive, and indicate some preparations being made by St. John for the long looked and hoped for handling of the winter maritime business of Canada which, if obtained, will mean much to the future building trade of the city. The new docks give accommodation for the largest of ocean going vessels, and are of great length and capacity. Hundreds have found employment in the work—in the surveying, dredging, pile driving, timbering and ballasting, and a large force of carpenters was required in the erection of the buildings. Had it not been for this work of magnitude there would have been noticed a depression in building circles.

The new fire engine house and hose station in the north end, which may approximate about $12,000, and which is being done by Sproul & Corbett, under superintendence and from designs made by R. C. John Dunn of this city, is well under way, and will be a fine building of brick and stone with a good appearance. Other works of construction throughout the city are of lesser importance.

A fine residence is being built on East King street, and on Wellington Row contractor Bates is pushing to completion a handsome residence for Dr. Magee. The new house for Chas. T. Nevins, on corner of Queen and Canterbury streets, is well under way, and in Portland the houses of Mr. Flewelling and Geo. Hoben are nearly completed. A number of other buildings are going up about the city.

The Diciples of Christ have had different plans under consideration for the building of a brick house of worship on Douglas avenue, but they will not begin operations until another spring.

The improvements to St. Rose's church spire in Carleton have now been completed and the church presents a fine appearance.

A small Anglican church at Red Head is being built, though the plans at first intended to be used have been given up.

Outside the city an average amount of building is being carried on.

At Fredericton some good structures are going up, chief among which is the Edgecombe building of brick. The burning of the brick Deaf and Dumb Institute there may necessitate its rebuilding next summer, though a decision to that effect has not yet been arrived at.

Sir Wilfred Laurier, on the occasion of his recent visit to Moncton, laid the corner stone of a large high school building.

The masonry of the new town hall in Chatham is now completed by B. Mooney & Sons, of this city, and tenders are asked for construction of a brick fire engine house and town offices in Amherst, N. S. As this is the seat of the big contracting firm of Rhodes, Curry & Company it is expected that they will secure the job without much opposition.

In Annapolis, N. S., a masonic temple of brick and stone with 40 feet frontage, to cost about $5,000 or $6,000, is going up.

The new Lefebore Memorial Hall at Memramcook is now completed exteriorly; it is a fine specimen of architecture, and the interior is also finished in good taste.

At the recent exhibition held here a fine exhibit of granite was made by the Dominion Granite Co. Their showing of black granite attracted particular attention by its marked brilliancy and by the prominence in which the letters stand out without being painted. Experts have said that this black Welsford granite is the finest that can be found, and the owners of the quarry are filling large orders, some to Scotland and England.

The rise in the U. S. tariff on undressed building stone to 12 cents a cubic foot or 40% of cost, three times what it formerly was, has affected the stone business in this locality to a considerable extent. Some of the best and handsomest building stone obtainable is quarried in the maritime provinces, and those interested are disappointed that the Canadian tariff is not higher. In shipping from here to Montreal and points west the American article has also great advantages in freight rates. Competition from Scotland is even greater—the long overland haul from here being from $4 to $5 per ton, as against only $1.25 from the old country.

That Toronto thinks well of our stone is evidenced in its new municipal building, constructed of brown stone from the Woodpoint quarries in Westmorland County, N. B. Among other structures built of this stone is the drill shed in Halifax, costing a quarter of a million dollars, the new high school building erected last year in this city, and the Wygoody building on Germain street.

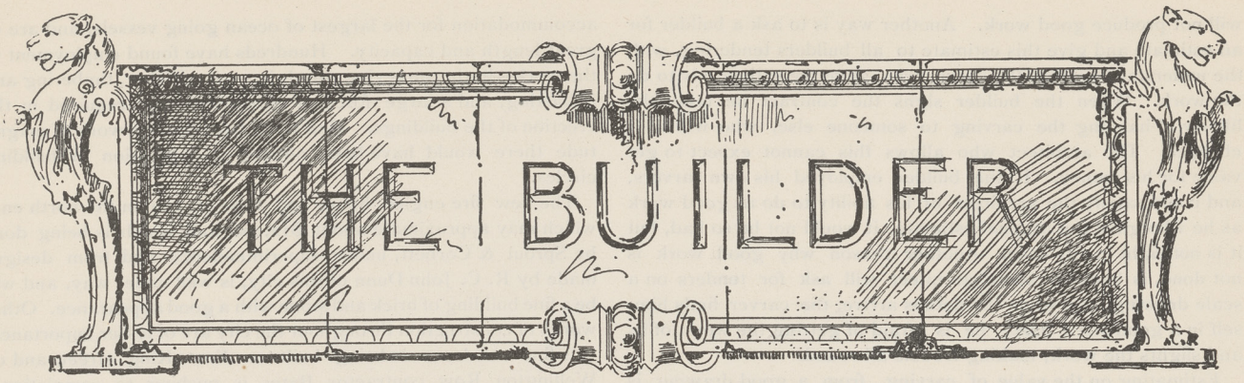
City Inspector Meagher is endeavoring to create greater respect among the builders for the by-law which provides for panelling brick buildings. A meeting will be held to reconsider the question.

The winter mechanical drawing classes have been reorganized at the Y. M. C. A. under the instructorship of H. H. Lordly, C.E., and F. G. Burton, B.A. So little opportunity is afforded in the city for such instruction that these classes are meeting with good success. A woodworking class is also being formed, having at its head one of the best woodworkers in the city.

The report is given, with regret, of the death of Mr. J. H. Pullen, a much respected and esteemed painting contractor, who for many years has done business in the city. His son, J. H. Pullen, will carry on the business at the old stand on Horsefield street.

Mr. Ernest Fairweather, architect, of this city, has gone to Boston and New York on a business and holiday trip.

ST. JOHN, N. B., Oct. 9th, 1897.



[THIS DEPARTMENT IS DESIGNED TO FURNISH INFORMATION SUITED TO THE REQUIREMENTS OF THE BUILDING TRADES. READERS ARE INVITED TO ASSIST IN MAKING IT AS HELPFUL AS POSSIBLE BY CONTRIBUTING OF THEIR EXPERIENCE, AND BY ASKING FOR PARTICULAR INFORMATION WHICH THEY MAY AT ANY TIME REQUIRE.]

Repairing Old Plastered Work.

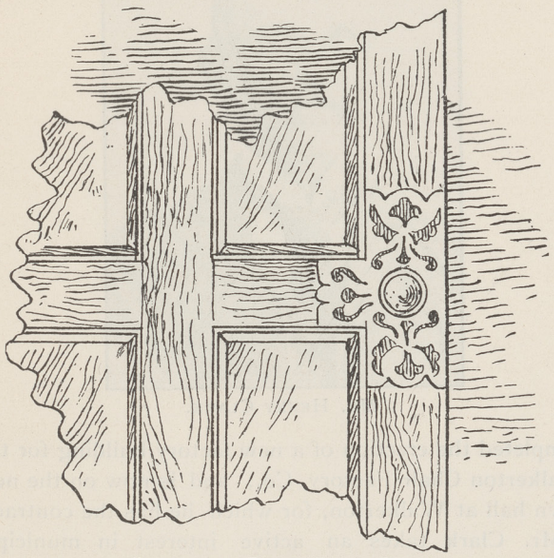
LAST month we made some quotations from Millar's new work on "Plaster and Plastering," of a practical kind. We follow up these with more of the same nature: "When repairing or making additions to old plaster work, care should be observed in cutting the joints, so that the key of the existing work is not injured or broken. The joints one way should be cut on the studding or joists, and in a line with the laths the other way. A joint at the edge of a lath is stronger than at the centre. If the lath work is weak, the joints should be cut diagonally. Never use a hammer to cut joints on lath work, for the repeated impacts will weaken and crack the old work. If the old plaster is hard, cut the joint with a saw, or with a hammer and chisel, and finish with a strong knife. Avoid acute angles in patches; square, round or oval patches not only look better, but are much stronger than ziz-zag ones. Having cut the joints neat and square on edge, and then repaired the old lath work, brush the joints and the laths with a dry broom, and then wet the joints, but only damp the lath work, as excessive water tends to warp the laths. The joints are sometimes painted to prevent damp from extending to the old work, or causing injury to any surface decoration. Gauged coarse stuff is generally used for weighing out, and gauged putty for finishing ordinary work. The coarse stuff is generally gauged with coarse plaster. For small patches, the whole thickness is generally brought out in one coat, but for large patches it is best to lay a first coat and then scratch it in the usual way. If time permits, this should stand for one day, or even two, to allow the lath work to settle. The stronger and stiffer the gauge, the less power the lath will have to warp. The floating coat is gauged moderately stiff with coarse plaster, or with fine plaster and coarse in equal proportions. When laid the surface is ruled in with a straight-edge, keeping it within the line of the old work to allow for plaster swelling, and a thickness of 1-16th inch for the finishing coat. It is often necessary to drag the surface down to allow the finishing coat to be ruled fair and flush with the old work. The surface should be left fair but rough. Gauged work should never be scoured, as it only kills the plaster, and therefore weakens the body of the material. The putty for the final coat should be gauged with fine plaster and a little size water. After being laid, the surface is ruled flush with the old work, and when firm it should be smartly trowelled off, and finally finished with a semi-wet brush. The joints should be trowelled flush and smooth, and the old part brushed to free it from any gauged stuff. All rubbish should be damped as it falls and removed as soon as possible, to prevent further dust and dirt. Parian or other white cements are used for best work, or where time is a consideration. All white cements having plaster for their basis are manufactured to be non-effervescent, non-porous, durable, free from liability to unequal shrinkage (which causes cracks), and free in working. They form admirable materials for repairs or additions. When making good old or broken lime plaster work with any of these cements, the joints and lath nails must be painted with red-lead, quick-drying paint or with shellac. Galvanized nails ought to be used for the lath work where these cements are used. Small holes and cracks are usually stopped with fine plaster gauged with putty, or better still, putty water. Parian cement is also used for a similar purpose. The holes and cracks should be brushed with Parian solution before the stiff Parian is applied. This solution is simply fine Parisian gauged to a thin creamy consistency with water. New or damp lime-plastered walls can be painted or papered much sooner, and with greater safety, if brushed with a thin Parian solution. It is also useful for stopping the suction on dry floating and fibrous slabs before laying the final coat. Several new patent plaster and white cements are well adapted for repairs or where time is limited." Canadian plasterers will find much in the foregoing that is useful, instructive and money-making.

Cracked Plaster Work.

QUOTING again, we get the following: "Cracks in plaster work are due to various causes. They may act individually or in combination. Cracks are often caused by settlement in the building. These cracks may be easily discerned by their breadth, depth and length. They also arise from the shrinkage of bad or unseasoned timber used in construction or framing of the building, which may cause displacement in the joists or the laths. Other causes are the too sudden drying of the work; strong winds, or heat; the laying of one coat of mortar on another coat, or on walls that have a strong suction, which absorbs the moisture or 'life' of the coat being laid, when it becomes short or crumbly, scaly, and apt to peel or fall off. In this last case it does not set, but only dries and shrinks, which gives rise to cracks, and eventually falls or crumbles away. The use of bad materials, insufficient use of lime and hair, or scamping of labor is often followed by cracks. Insufficient labor and unskilled workmanship in the application of the materials is a great source of trouble, but it will be understood that the best quality of labor will not make bad materials good and strong; and, on the other hand, the best materials will not compensate for bad labor. It is only by judicious selection of materials, and their skilful manipulation, that a high and enduring class of work can be obtained."

Door Plates.

No doubt every person has noticed on a door much in use that at one spot just about the door-knob the paint has been worn off, or is blackened and soiled by the continual contact of the hand in opening or closing the door. A number of devices have been tried to remedy this trouble, but few of them have ever lasted long enough to establish a reputation. Some housewives paint the stile of the door for about fourteen inches in length, and the rail for three or four inches in length, with good lamp-black paint and linseed oil. But the trouble with this is that for a short time it hides the dirt, but, when it wears off, it leaves the door in a worse predicament than ever, and it does soon wear off. Iron plates have been tried, and they do fairly well but are unsightly, and though blackened by the Barff process, the black wears off and the iron rusts. So far, nothing answers as well as brass, either silver plated, or nickel plated, or better still, left in its native state. The sketch shown herewith illustrates a brass door plate, through which the spindle of the door knob goes. This is made of sheet brass, and can be made by any clever workman who has access to an ordinary scroll saw, or jig saw. The brass may be about 18



Sketch of Brass Door Plate.

gauge, and the saw should have very fine teeth, not less than twenty to the inch. Holes for round-headed screws and to insert the saw should be drilled through the plate before the sawing is commenced. A good way to work them out is to saw two at a time, and to place them between two thin pieces of wood, paste the pattern on the top piece of wood and follow the lines, sawing through the whole four thicknesses at once. This makes a very handsome plate and will protect the door for a whole life-time. Enough screws should be put in to hold the brass firmly to the door. It may be polished with a little fine emery rubbed on with a cloth moistened in sweet oil, after which rubbing with rotten stone and water will give the brass a fine soft polish; and an occasional rubbing will keep the brass in apple-pie order.

Hanging Sashes.

There is no reason why a sash should not be so hung that the slightest touch of the hand will move it to the desired position, and yet have it fitted so close that it will not chatter with the wind or allow a gale to enter the room. One of the reasons that sashes do not work well is, that when the frames are made, sufficient care is not taken to make the pulley stile straight and true on the face. Often these are left hollow in the centre; then the sash must be made wider at the meeting rail than it is at the bottom or the top rail, if it is to fit snug. This being the case, it is impossible for the sashes to slide either up or down, so the workman is compelled to narrow the sashes at the meeting rail in order to allow them to slide, and the consequence is that a certain amount of playroom obtains between the sash and the jamb at the meeting rails, which is sure to cause rattling at that point when the wind blows on that side of the house. To make a good tight window, and one in which the sashes move easily, the pulley stiles should be straight and parallel to each other. Another condition that must be complied with to insure satisfactory results is, that there must be as little "play" as possible between the sashes and the stops. A rough workman will leave from 3-32 of an inch to 1/8 of an inch play, in order, as he imagines, to allow for the space required for five or six coats of paint, and this leaves lots of room for "rattle." One-sixteenth of an inch space between side of stile of sash and stop is ample, and more, to allow for paint. A good painter does not besmear his work, but puts on his paint so deftly that it would require fully one hundred coats to make an inch in thickness; hence, six one-hundredths of an inch would be all the space required to enable the sash to move with freedom in its frame. Sometimes window frames are forced out of shape after they are "set" in the walls. If the building is a frame one, the siding or other covering is cut in too tight against the casings, and this is apt to force the middle of the frame inwards, making the pulley stile convex or winding on the sash side. When this occurs, it becomes next to impossible to make the sashes slide easily in their frames, for the lower part of the lower sheet will be wider than at the meeting rail if it fits snug, and it would be impossible to raise it. This necessitates planing off the lower part of the stiles until the sash is the same width at the bottom as at the meeting rails, a condition that is sure to cause a rattling window. The top sheet, of course, will have to be treated the same as the bottom one, which gives both sheets an opportunity, whenever the wind blows, to play a "rat-a-tat-tat" while the storm lasts, much to the inconvenience of those occupying the room where the window is situated. When sashes have been properly fitted and hung, and the weights and sash lines tested and properly secured, the "pocket" cover should be nicely screwed in place and left with a smooth face, so that the sliding sash will not make any abrasion, or have more friction at the joint, than elsewhere. The pulley axles should be lubricated with graphite, black-lead, or, if this is not available, a little hard mutton tallow should be placed in the axle bearings; this will make them run smooth, or at least smoother than if left without some sort of lubricating matter altogether. The common sash pulleys are poor things at best, and should never be used in good buildings, as they make as much noise when in use as a locomotive running at full speed. The best pulleys in the market are not any too good, as they are made as cheap as they can be turned out, and are rough and untruthful. The best axle pulleys are made in England, but they are costly. The axle is of fine steel, turned true in a lathe, and it runs in brass bearings, and there is a small hole in the stile-plate where a drop of oil may be inserted on the bearings when necessary. When a sash "sticks" in

the frame because of "swelling," or of having too much paint smeared on it or the frame, the trouble may often be cured by rubbing that portion of the frame in which the sash slides with a little moistened soap. Ordinary toilet soap answers the purpose fairly well and has no disagreeable following, but common yellow soap is much better. Fuller's earth may be used, but it is apt to dissolve the paint, and besides, leaves dust and dirt behind. All sashes should have window locks, whether they be situated up or down-stairs. While the main object of a window lock is to keep out interlopers, it has a secondary importance; it should be so arranged as to bring the two meeting rails snug together and hold them in that position, to the exclusion of wind and weather.

Staining Bricks.

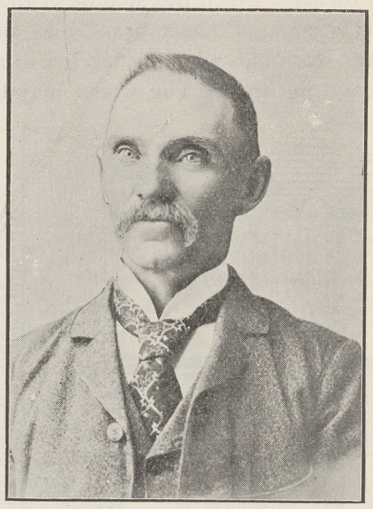
It frequently happens that a builder has to build an addition to some brick building already up; and it also happens that he cannot procure bricks to match the old bricks in color. To get over this difficulty he is compelled to use bricks available and render them the color of the old bricks by staining, or staining the old bricks to correspond with the new. There are several methods—all good—of staining bricks, and for the benefit of those builders who may require to employ one or other of the methods, we submit the following: To make a good durable red stain, mix Indian red, or Venetian red, with a solution of good Portland cement, regulating the color by adding a little Spanish brown if necessary. Mix with this fine sand, washed clean and dried, before being added to the solution. Cement and sand may be used in equal proportions. The mixture is to be a little thinner than ordinary paint. It must be stirred while being used, and applied with a brush. Another red stain, which is easily applied, looks better than the first, but lacks durability. Take as follows and in proportion to amount required: One ounce of glue melted in one gallon of water, add a piece of alum the size of an egg, then a half pound of Venetian red, and one pound of Spanish brown. Try the color and mix more light or dark to suit. For a buff or cream color, use any yellow mineral paint, such as yellow ochre, adding a mineral white to make it light if necessary. For black, use asphaltum heated to a fluid state before applying. Bricks should be stained black before being laid, and the best way is to make the brick moderately hot, then dip them about one inch in the melted asphaltum, and leave them to dry before being used. This makes a good durable job, if they are held in the mixture for a moment or two in order that the color may have an opportunity of being absorbed to the depth of a sixteenth of an inch. Another method of staining bricks black is to mix together asphaltum and linseed oil, and heat the mixture until it will mix together well. Heat the bricks and dip them in the mixture, where they should remain for a short time. The best way to stain black is to have a flat pan over a fire; fill the pan until it has about an inch in depth of the mixture. Place in the pan as many bricks as it will hold, then take out the first brick and replace it with another. Put the stained brick on a board or a clean spot to dry; then take out the second brick and put another in its place; and continue this operation until brick enough are stained, minding to keep up the supply of asphalt and oil.

MR. HENRY CLARK.

We have pleasure in publishing the accompanying photo and sketch of Mr. Henry Clark, of Walkerton, Ont., a contractor well known throughout Western Ontario.

The subject of this sketch was born at Portsmouth, England, on the 10th of June, 1843, and is therefore now 54 years of age. After leaving school Mr. Clark followed the trade of ship-joiner at London, England, until the year 1869, when he decided to come to Canada. After visiting several towns on his arrival in this country, he settled in Galt, engaging in carpenter work and sub-contracting until 1895, when he removed to Walkerton and has since been engaged in building in that place and neighboring towns.

Among the many buildings erected by Mr. Clark are St. Paul's church, public school, carpenter work of the Robinson & Rowland block, Merchant's bank, English church, Baptist church manse, and a number of residences and stores in Walkerton. Mr. Clark has just



Mr. Henry Clark.

completed the erection of a new factory building for the Walkerton Chair Factory Co., and is now on the new town hall at Walkerton, for which he has the contract.

Mr. Clark takes an active interest in municipal matters, and has been elected as alderman for his town for several terms.

THE PROPER CONSTRUCTION OF ICE HOUSES.

The committee appointed by the Association of Railway Superintendents of Bridges and Buildings of the United States to report upon the best method of constructing ice houses, make the following recommendations: In all ice house construction the most important consideration is the

Insulation.—The ideal ice house is simply a storage chamber, absolutely protected on all aides against the absorption of external heat and supplied with well designed drains for the prompt removal of all water resulting from the little melting that, in spite of all precautions, will occur. Heat travels or is conveyed by radiation, conduction and convection. For the purposes of this discussion the outside of the building and the ground (however themselves heated) may be assumed to be the source of the heat against which it is desired to insulate the storage chamber. Experiment has shown that cells or small chambers of dry, dead air form the best insulator. In the proportioning of these

air-spaces two facts must be borne in mind, (1) the intensity of radiant heat varies inversely as the square of the distance from the source and (2) soon as a current, however slight, of air is formed in any air space, heat is carried by convection around in that chamber. Of course two air spaces are more effective than one, and three more than two, but there is an economic maximum dependent on the circumstances of each case.

Material of Construction.—Wood is best adapted for use in buildings of this character, being itself a non-conductor of heat, and not retaining the heat as does either natural or artificial stone, it permits the cheapest and at the same time the most efficient construction. In some municipalities certain regulations have been established governing the construction of all buildings within the "fire limits" and such laws usually are directed first to the material of construction; at such a point it will be well to consider the advisability of locating the proposed ice house beyond these fire limits to conserve the use of wood in the construction.

Plan.—All ice houses should be built in sections, the size of section being governed by the quantity of ice used; in some cases it is advisable to construct across each section lateral partitions which will still further reduce the amount of ice exposed to contact with the outer air while part of the stock is being removed. At the centre of each section and at about the level of the first door should be placed a platform, say 6 × 10.

Proportions.—Assuming that a cubic foot of ice weighs 57.2 lbs., a ton of solid ice would occupy about 35 cubic feet. Some years since, 40 cubic feet were considered ample in which to store a ton of ice cut in such sized cakes as are usually stored, but that allowance has been increased to 45 and even 50 cubic feet. Any organic matter, such as that generally employed—hay or sawdust—not only dirties the ice, but being dampened by the melting, soon begins to rot, decompose, and become foul. For this reason the use of any organic matter between walls is to be deprecated. The use of short fibre asbestos in the outer air space has been suggested, but not to our knowledge tried; however, at a weight of 12 lbs. per cubic foot and at a cost of $16 per ton in car load lots, f.o.b. New York, the expense is practically prohibitory. This asbestos, if used loosely, as it should be if used at all, settles after being wet, and though it still retains its spongy character, is reduced in volume, leaving the upper portion of its confining chamber empty.

Site.—While little scope is usually given in the selection of a site there are certain precautions to be taken in order to secure a good bed. If the site chosen be on a little rise above the adjacent ground level, surface drainage will give no trouble; otherwise, provision for it, as well as for the water from the melting ice, must be made.

Preparation for the Bed.—Assuming the ground to be good, the excavation below frost line is made for the house foundations, and about two feet in depth inside the foundation for the reception of the bed. If the digging shows a clay soil, drains should be provided to carry off the water from the ice, and these drains should be air-trapped.

Cinders or gravel should then be placed in the excavation, as a bed whose top should be raised slightly above the surrounding ground level and inclined with an easy and gradual slope to the centre. On this bed, before ice is stored, rough hemlock plank should be laid with, say two-inch spacing to keep the ice off the bed itself, yet permit the water to pass through readily. A good concrete floor, well drained from the centre, would make a better job and be more satisfactory, but its cost precludes its general use in construction of this class.

Foundations.—The foundations also, whether of wood, brick or stone, should contain an air space as a further insulation; heat may reach the storage chamber as well under as through the walls; in some cases this, we know, is the case.

Construction.—It is claimed by some that the side walls should be constructed with a batter, but your committee do not approve this idea; the idea is evidently to relieve the side walls of any pressure that may be brought upon them by the spreading of the mass of ice as it melts, but if the slightest care has been exercised in the storing of the stock, that condition will not be found to exist, especially as the ice naturally melts most on the outside of the mass; at any rate, in order to be effective, assuming such a condition to exist, the batter would have to be increased over any we have yet heard proposed.

If considered necessary, to resist wind pressure, etc., the sills may be tied to the foundation. They should, on a brick or stone foundation, be laid in a lime mortar in any event. The sheathing, with the exception of the outside, may be rough. While there will be three extra courses of this rough sheathing over what is usually found, the lumber is cheap and the results obtainable will fully warrant the slight increase in cost.

The paper used should be saturated (not painted or coated) and laid with laps to the centre of the sheet, virtually giving, then, two thicknesses of the paper in each lining. The sheets should be well cemented together, and the paper tacked securely to the sheathing. A paper similar in character to the "Giant" of the Standard Paint Co. is recommended, which running, say 80 to 85 lbs. per roll of 36 inches width, and containing 1,000 square feet, will cost about $6.25 per roll in place, including cement and tacks. With this paper should be used a cement similar to that used for roofing purposes, which must be flexible (not brittle), strong, inodorous, and lasting. The job, when properly done, will make each space air and water-tight. The construction here recommended is the best practice of commercial cold-storage houses, only so modified as to be cheap to construct, while yet retaining practically all the advantages of a more expensive construction.

At each gable end ample ventilators should be placed, permitting a free and full current of air over the ceiling of the storage chamber. The roof should be shingled and the valleys between sections well lined. There is nothing, apparently, gained by having the doors, through which to handle the ice, vertically continuous. A stiffer frame, freedom from excessive sag of the lower doors, and a closer, tighter fit of each door are secured by introducing a stiff sill framed under each door.

As may be inferred from the foregoing, we do not approve the use of tie-rods to "stay" the sides of the sections, because of their unreliability; they must of necessity sag under the weight of the superimposed ice, and then they either spring the side walls in, or, because of the low temperature and tension to which they are subjected, break; even in the latter event they spring the side walls more or less before they let go.

A rigging amply stayed should be located over each

line of doors to take the hook of the pulley for the hoisting rope in handling the ice in and out of the house.

A couple of coats of a good, light-colored, zinc paint should be applied to the outside of the house.

MANUFACTURES AND MATERIALS

The Sackville Machine & Foundry Co., Ltd., has recently been incorporated at Sackville, N. B., to make water works supplies, hardware, etc.

Negotiations are in progress with the object of consolidating the various potteries at St. Johns, Que., and to carry on the business as one concern on a large scale.

The Winnipeg Heater Company, of Toronto, Limited, has lately been granted incorporation with a capital stock of $24,000, to manufacture heaters, fuel burners, radiators, etc.

The Dominion Granite Co., owners of black and red granite at Welsford, N. B., and Shelburne, Nova Scotia, are shipping large quantities of this material to Scotland, where a large demand has developed.

The Toronto Paving Brick Company, Limited, has recently been granted a charter. Its capital stock is $90,000. The promoters are: Messrs. A. E. Ames, Joseph Kilgour, A. A. McMichael, Wm. Crawford and J. B. Noble.

A deposit of black granite is reported to have been found at Welsford, Nova Scotia. A Bridgwater firm is said to have acquired the property, and will erect polishing works, for the operation of which there exists an excellent water power.

The Owen Sound Portland Cement Co. are installing in their works at Shallow Lake an electric lighting plant, that they may be enabled to operate both day and night. This is a gratifying evidence of the growth of the demand for the company's product.

Mr. Bartholomew, president of the British syndicate which purchased the asbestos mine at Danville, Que., recently paid a visit of inspection to the property, and is reported to be extremely well satisfied with the investment. Upwards of half a million dollars have been expended in plant and machinery during the past four months. Asbestic, the new building material obtained from these mines, is arousing considerable interest and favorable comment in Great Britain and the United States, as well as in Canada.

Messrs. Gibson, Stuart & Hanson, owners of the Bocabec black granite quarries at St. George, N. B., are said to have given an option of purchase to an American company, of New Britain, Conn. A representative of this firm, Mr. H. Oldershaw, recently visited the quarry and expressed himself favorably regarding the adaptability of the stone for polishing and manufacture into slabs for the interior decoration of buildings as well as monumental work. If the sale should be consummated the purchasers will erect polishing works.

F. Hilliard, Renfrew, Ont., is erecting a tile kiln in connection with his brickyard.

The master plumbers of St. Thomas, Ont., have recently organized an association, the officers of which are as follows: President, J. Flaherty; vice-president, J. Williams; secretary-treasurer, J. Stacey.

In graining doors, when knotted oak is required, which is generally done on the panels, the knots are put in with a fitch or tool, and sweeps of light shades encircling and running from the clusters of knots; then a finer kind of veining and growth is put in. This style makes a very handsome door when properly done, and gives a good deal of license to the fancy of the grainer in producing varied effects.

Paper pulp can be used very advantageously in stopping cracks. It should be kept in a close stoppered bottle, in order that the moisture may not evaporate. When required for use make it of the consistency of thin gruel, with hot water; add plaster of Paris to make it slightly pasty, and use at once. Mixed with glue, and either plaster of Paris or Portland cement, paper pulp is the best thing to stop cracks and breaks in wood. Paper pulp and fine sawdust, boiled together for hours and mixed with glue dissolved in linseed oil, makes a perfect filling for cracks in floors. It may be put on and left until partly dry, then covered with paraffin and smoothed with a hot iron.

THE TECHNICAL TRADE JOURNAL AS AN EDUCATOR.

THE value of a well-conducted trade journal to a man who is engaged in the industry represented by that publication cannot be over-rated, writes Mr. Thos. P. Pemberton in the Master Steam Fitter. Nearly all trade papers, as the term is understood, are more or less technical in character, giving information not only of the general condition of special industries, but also of the changes and improvements made by manufacturers in design, process and construction. When these can be presented to readers by means of outline drawings and finished engravings the usefulness of the trade paper is still further increased. The daily newspapers pay little attention to the multitudinous details which are of interest to manufacturers. They may announce new inventions, the erection of large works, peculiarities in mechanism and operation, or great scientific discoveries, and these, undoubtedly, interest general readers and satisfy the public mind in its eagerness to know, at least, something of all current developments and events. But when the manufacturer desires minute information regarding his own special industry, he has recourse to technical and trade journals, which give him information of what others are doing and how they are doing it. The industrial press, when it performs its functions properly, does precisely that which the daily press leaves undone. In saying this we do not forget the wonderful enterprise of some of our large American dailies in giving illustrated descriptions of many new inventions and discoveries, but these, however satisfactory for general readers, are incomplete for manufacturers who may be particularly interested in all the details of design, construction and operation.

But how is the technical trade paper an educator? Its mission and purpose are, in its successive issues, to cover the whole ground and to confine its information to the particular field in which it operates. It reports and explains many new processes, whether they be developed at home or abroad; it illustrates and describes important new machines and apparatus; it records the progress of invention and improvement in different branches of industrial art and applied science; it announces what is being made and sold; the organization of new firms; the award of contracts; the construction and operation of large plants; and gives special information on special subjects for manufacturers of specific articles. All this and much more is in the routine and absolute requirements of business education.

The advertising pages in such a journal are not a mere dreary and uninviting series of puffs and boastings. They are an illustrated catalogue and chronicle of the supplies which are required in particular branches of industry. They indicate the most advanced state of ingenuity; they present to the eye and the mind qualities and forms; they tempt the manufacturer and the consumer, as a matter of self interest, to examine them. Those who do not examine them exclude themselves from information for which, if they comprehended their own interests, they would be willing to pay handsomely.

Trade journalism in this country has acquired dignity and importance; and in this field, as in all others, popularity, success and rapid growth are the portion of journals which prove their possession of brains, enterprise and sincere devotion to the interests of which they are representatives. They are educating mediums for the advancement of civilization, the progress of commercial enterprise, manufacturing industry and mechanical ingenuity. They are the exponents of taste, design and utility, and an inestimable benefit to producers and consumers, to both employer and the employed.

A new bridge over the Danube at Czernavoda is now the longest in the world, its length being 13,325 feet to 10,725 feet of the Tay bridge. The widest span is 620 feet wide, and there are two others of 455 feet.

VARNISH TO PROTECT POLISHED METALS FROM RUSTING.—Dr. C. Puscher recommends the use of a solution of paraffin in petroleum (1 part by weight of 3 in petroleum), as a varnish which may be usefully applied to polished metals, especially as after having brushed this liquid over the surface of this metal it may be gently wiped clean with a soft piece of flannel, so as to leave only a very thin film of the varnish, yet sufficient for the protection of the polish.

HOW TO MAKE ELEVATORS SAFE.

THE margin of safety demanded in elevators is, naturally, very generous, and there are various forms of safety clutches, many of them automatic in their action, but experience goes to show that none of these can be a full substitute for the air cushion in the pit. The action of this device in insuring safety is almost magical. In some experiments made in a lofty store in New York, the lift was taken to the top of the building and allowed to fall with the brake off. A writer in "Scribner's Monthly" says it fell to the top of the pit with tremenforce, and struck the cushion of air with a sound as if it had struck soft earth. It seemed to stop suddenly at the top of the pit and then slowly settled down to the bottom. It was clear that the pit was too small at the top; that the slope of the sides was too slight; that if the escape of air had been freer at the impact the stopping would have been sensibly gradual. The stop was really gradual, as was shown by the fact that a half-dozen eggs in a paper bag, that had been laid on the elevator floor, survived the fall without injury. As a reserve against any possible failure of the other safety appliances, this seems an expedient worthy of imitation. Its presence would conduce to a feeling of perfect security on the part of timid people who have sometimes to use these elevators.

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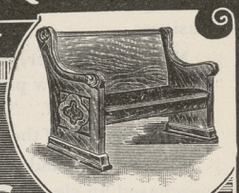

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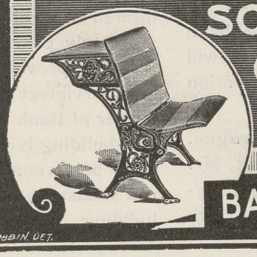

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Mr. George Grant, contractor, Arnprior, has completed the erection of the new two-story brick public school in that town.

Mr. Sidney Pomeroy, Orillia, has now thoroughly refitted the planing mill he lately added to his building and contracting business.

Mr. F. E. Fortier, of Pembroke, who has the contract for the erection of the new post office at Arnprior, has the building nearly ready for the roof. This handsome building will greatly add to the appearance of the main street of the town.

The Owen Sound Portland Cement Co., of Shallow Lake, have purchased an electric plant from the Royal Electric Co., and will have the same operating in a very short time. It is their intention to work twenty-four hours per day during the season.

At the annual meeting of the Hamilton Art Students' League, held recently, the following officers were elected: President, Mr. J. R. Seavey; vice-president, Miss Clara Galbraith; secretary-treasurer, Mr. H. L. Wright; board of control, Messrs J. S. Gordon, A. H. H. Hemming, Wm. Marshall, Miss Rose Baine, Miss Galbraith, S. L. Wright, J. R. Seavey.

Messrs. William & Walter Stewart, architects, of Hamilton, have under construction a new building for the Sun Life Assurance Co., on the site of the old post-office building. A considerable amount of the stone belonging to the old building is being employed in the new, but the material has been so nicely cleaned that an observer would have no idea that it had previously been in use.

Sir Wilfred Laurier laid the corner stone of the new St. Luke's hospital at Ottawa a few days ago. The building was designed by Mr. E. L. Horwood, a local architect. The dimensions are, 230 feet in length, 75 feet in depth and 85 feet in height. The structure will be made as nearly fireproof as possible. It will be lighted by electricity and heated by steam and hot air. It will ultimately provide accommodation for 120 patients. The present building provides accommodation for about 65 patients. The same architect has been commissioned to erect a building on the corner of Bank and Sparks street for the Sun Life Assurance Co. The building is designed in the Italian renaissance style, the lower story being constructed of Miramichi green and New Brunswick red sandstone in alternating courses. The upper portion of the building is of buff pressed brick, ornamented with terra cotta. The northeast corner is rounded and surmounted by a copper dome supporting a globe and a figure of Mercury, which is mounted on ball bearings so as to act as a weather vane. It is intended to make the structure absolutely fireproof, the construction being of steel covered with porous terra cotta.

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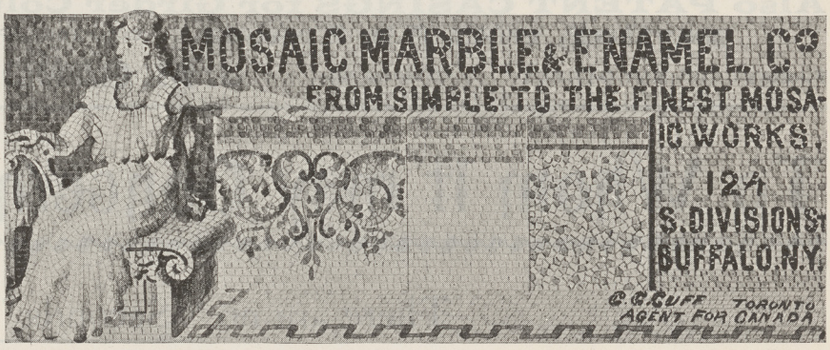

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